

The Bulletin of Zoological Nomenclature

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Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume), as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be by e-mail to 'iczn@nhm.ac.uk' where possible.

(2) The Commission votes on applications six to eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to 'join-iczn-list@lyris.bishopmuseum.org', leaving the subject line and body of the message blank (for further details see BZN 59: 234).

(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 60, part 4, 18 December 2003) went to press. Under Article 82 of the Code, existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 999: F.A. Quenstedt's trinominal nomenclature (1845–1888): a proposal to stabilize the usage of the third names of ammonites and to place 34 important Quenstedt names of ammonites on the Official List of Specific Names in Zoology (Cephalopoda, Ammonoidea). J.H. Callomon, D.T. Donovan & M.K. Howarth.

CASE 3303: *Hyloxalus panamensis* Dunn, 1933 (Amphibia, Anura): proposed emendment of spelling from *H. panamansis*. T. Grant, D.R. Frost, R. Ibáñez D., C.W. Myers & J.M. Savage.

CASE 3304: *Oceania* Péron & Lesueur, 1810 (Cnidaria, Hydrozoa): proposed conservation of usage by the designation of *Oceania armata* K  lliker, 1853 as the type species. P. Schuchert.

CASE 3305: TUBIFICIDAE Vejdovsk  y, 1876 (Annelida, Clitellata): proposed precedence over NAIDIDAE Ehrenberg, 1828. C. Ers  us.

CASE 3306: *Drosophila elegans* Bock & Wheeler, 1972 (Insecta, Diptera): proposed conservation of the specific name. M. Ashburner & G. B  chli.

CASE 3307: *Curimatus nigrotaenia* Boulenger, 1902 (Osteichthyes, Ostariophysi): proposed conservation of usage of the specific name by designation of a new lectotype. H.A. Britski & R.P. Vari.

CASE 3308: *Dactylozodes* Chevrolat, 1838 and *D. (Parazodes)* Cobos, 1959 (Insecta, Coleoptera): proposed conservation. C.L. Bellamy & T.M. Rodriguez.

Philip K. Tubbs: Executive Secretary of the International Commission on Zoological Nomenclature, 1985–2002

We record with great regret the death on 22 January 2004 of Dr Philip Kingsley Tubbs at the age of 70. Philip was Executive Secretary of the Commission from 1985 until January 2002; sadly, he had only two years to enjoy his retirement. Even after retirement, he happily accepted membership of the International Trust for Zoological Nomenclature and served as Nomenclatural Consultant to the Commission.

He succeeded Richard Melville as Executive Secretary, having previously been a University Lecturer in Biochemistry at the University of Cambridge, England. During his 16 years work for the Commission he served under four Presidents—Prof Ride, Prof Kraus, Prof Minelli and Dr Evenhuis. He was a member of the Editorial Committee for the 4th Edition of the International Code of Zoological Nomenclature and was involved in its translation into many languages. In addition to his work in the preparation of many of the Commission's publications, he was responsible for launching the Commission into a web-based future, setting up its website in collaboration with BIOSIS, UK.

Executive Secretary of the International Commission on Zoological Nomenclature

Dr Andrew Polaszek has been appointed to the post of Executive Secretary of the Commission and Editor of the *Bulletin of Zoological Nomenclature* from 1 January 2004 in succession to Dr A. Wakeham-Dawson. Dr Polaszek is an entomologist, specialising in the taxonomy of wasps and bees, and has been based at The Natural History Museum in London since 1982. He is also a Visiting Scientist in the Department of Biology, Imperial College of Science, Technology and Medicine.

The International Commission on Zoological Nomenclature

The aim of the Commission is to bring stability to the use of animal names (zoological nomenclature). The Commission does this by:

(a) producing, publishing and periodically revising the *International Code of Zoological Nomenclature* (the Code), which deals with the formulation and use of animal names;

(b) considering and ruling on specific cases of nomenclatural uncertainty and dispute about animal names that are not automatically resolved under the provisions of the Code, via applications published in the *Bulletin of Zoological Nomenclature*.

The International Congress of Zoology founded the Commission in 1895. At present, the Commission consists of 25 zoologists from 20 countries whose interests cover most of the main divisions, including palaeontology, of the animal kingdom. The Commission is under the patronage of the International Union of Biological Sciences (IUBS). Commission members are elected by the vote of zoologists attending General Assemblies of the IUBS or other appropriate congresses. Nominations for membership may be sent to the Executive Secretary at any time. The Commission's history is described in *Towards Stability in the Names of Animals* (1995) (see below under 'Publications' for details). Further discussion of the Commission's activities can be found in BZN 48: 295–299 (December 1991) and BZN 60: supplement, pp. 1–12 (March 2003).

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The International Trust for Zoological Nomenclature

The International Trust for Zoological Nomenclature (the Trust) was founded in 1947 to manage the Commission's financial matters. It is a registered charity, based in the U.K. (No. 211944). At present, the Trust consists of 27 members from 13 countries. Discussion of the Trust's activities can be found in *BZN* **60**: supplement, pp. 1–12 (March 2003).

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The Commission's website

Abstracts of applications and Opinions, and a record of the names included in the *Official Lists and Indexes of Names and Works in Zoology*, are posted on the Commission's website 'www.iczn.org'. It is planned for this website to be extensively revised in the near future.

The International Code of Zoological Nomenclature

The aim of the Code is to provide the greatest universality and continuity in the scientific names of animals without restricting the taxonomy or classification of the animals for which the names are used. The current (fourth edition) of the Code was published by the Trust in 1999, and came into effect on 1 January 2000. This edition supersedes all previous editions and official texts are available in English, Catalan, Chinese (traditional), Czech, French, German, Japanese, Russian, Spanish and Ukrainian. Other translations are in preparation. See below under 'Publications' for sales details.

The Articles of the Code enable the user to decide the valid name for any animal taxon between and including subspecies and superfamily. The provisions of the Code can be waived or modified in particular cases where strict adherence would cause confusion. However, only the Commission, acting on behalf of all zoologists, can do this in response to formal applications that are published in the *Bulletin*.

The Bulletin of Zoological Nomenclature

The *Bulletin* is published four times each year. The *Bulletin* includes applications relating to animal names, comments on applications and the Commission's eventual rulings based on the Commissioners' votes (these are referred to as Opinions). Each Opinion published in the *Bulletin* is an official ruling of the Commission and comes into effect on the day of publication of the *Bulletin*. The Opinions are summarised in the *Official Lists and Indexes of Names and Works in Zoology*. The *Bulletin* also includes discussion papers on proposed amendments to the Code. See below under 'Publications' for how to subscribe to the *Bulletin* and for details about the *Official Lists and Indexes of Names and Works in Zoology*.

Publications

All publications listed below may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk). With the exception of the *Bulletin* (which can only be ordered from ITZN), these publications can also be ordered from the American Association for Zoological Nomenclature (AAZN), Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: smith.davidg@nmnh.si.edu). Prices listed below include surface postage. Please send payment with orders. Cheques should be made out to 'ITZN' (in sterling or dollars) or to 'AAZN' (in dollars only). Visa or MasterCard payments can be made to ITZN (but not AAZN). Please give cardholder's name, address, card number and expiry date when ordering.

The *Bulletin* subscription for 2004 is £127 or US\$225, including postage by accelerated surface post. Individual subscribers for personal use have a 50% discount making the subscription £63 or US\$112.

The *International Code of Zoological Nomenclature* (4th Edition, 1999; ISBN 0 85301 006 4; English and French in one volume) is available at £40 or US\$65, including surface postage. Individual purchasers who are buying the Code for personal use are offered a 25% discount (£30 or US\$48), as are institutions or agents buying five or more copies. Individual members of the American or European Associations for Zoological Nomenclature are offered a discount of 40% (price \$39 or £24). Information about the prices and availability of the authorised translations of the Code can be obtained from the following e-mail addresses:

Chinese (traditional)—wenhua@oceantaiwan.com

German—books@insecta.de

Japanese—tomokuni@kahaku

Russian—kim@ik3599.spb.edu

Spanish—mcnaz39@mncn.csic.es

The *Official Lists and Indexes of Names and Works in Zoology* gives details of all the names and publications on which the Commission has ruled since it was set up in 1895. The first volume published in 1987 contains 9917 entries, and a Supplement (2001) lists an additional 2385 entries. The cost of the 1987 volume and of the Supplement is £60 or US\$110 each, with reductions for both volumes ordered together and for individual buyers for personal use. Details available on request.

Towards Stability in the Names of Animals—a History of the International Commission on Zoological Nomenclature 1895–1995 was published in 1995 in recognition of the Commission's Centenary. This book (104 pages) contains 18 full-page illustrations, 14 being of eminent zoologists who played a crucial part in the development of animal nomenclature. The cost is £30 or US\$50.

Case 3276

***Narella* Gray, 1870 (Coelenterata, Octocorallia): proposed conservation of usage by designation of a neotype for its type species *Primnoa regularis* Duchassaing & Michelotti, 1860**

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Abstract. The purpose of this application, under Article 75.6 of the Code, is to conserve the current understanding and usage of the generic name *Narella* Gray, 1870 (family PRIMNOIDAE) for a deep-sea western Atlantic octocoral by designating a neotype for its type species *Primnoa regularis* Duchassaing & Michelotti, 1860. The holotype of *P. regularis* was recently found to belong in the genus *Paracalyptrophora* Kinoshita, 1908. It is therefore proposed that the holotype of *Primnoa regularis* be replaced with a neotype that represents the established interpretation of that species and which will conserve the stability and usage of the generic names *Narella* and *Paracalyptrophora*.

Keywords. Nomenclature; taxonomy; Octocorallia; PRIMNOIDAE; *Narella*; *Paracalyptrophora*; *Narella regularis*; Lesser Antilles.

1. The genus *Narella* Gray (1870, p. 49) was established for a deep-sea octocoral and based on the single species *Primnoa regularis* Duchassaing & Michelotti, 1860 (p. 293), the type species by monotypy. The species *P. regularis* was described from one dried specimen collected at Guadeloupe (Lesser Antilles). The holotype is deposited in the Museo Regionale di Scienze Naturali, Turin, catalogue no. Coel. 275 (ex. 175), and consists of one main colony and about a dozen smaller branches that have broken from it. No polyps are intact, but some coenenchymal sclerites are present on the stalk and as residue. The species was briefly described without comparison with other species, and illustrated in such a way that did not indicate its colony morphology.

2. Wright & Studer (in Studer, 1887, p. 49) described the genus *Stachyodes* without included species (type species by subsequent monotypy by Wright & Studer (1889) *S. regularis* Wright & Studer, 1889). Versluys (1906) recognized that *Primnoa regularis* (type species of *Narella* Gray, 1870) belongs in the genus *Stachyodes* Wright & Studer, 1887 and renamed it *S. studeri* to avoid junior secondary homonymy with *S. regularis* (Duchassaing & Michelotti, 1860). However, Versluys persisted in using the junior synonym *Stachyodes*. Deichmann (1936) resurrected the name *Narella*, and since then that name has been consistently used for species of this genus. Furthermore, the name *Stachyodes* Wright & Studer, 1887 is a junior

homonym of *Stachyodes* Bargatzky, 1881, a fossil stromatoporoid, and thus is not available for this octocoral genus.

3. Wright & Studer (in Studer, 1887, p. 49) described the genus *Calypterinus* (type species by subsequent monotypy by Wright & Studer (1889) *C. allmani* Wright & Studer, 1889). *Calypterinus* was also synonymized with the octocoral *Stachyodes* (= *Narella*) by Versluys (1906) and has not been used as a valid name since Roule (1896) or in combination with any other species but its type species.

4. The genus name *Narella* has gained acceptance over the last 50 years. It has been cited as a valid genus in the major revisions of the order (see Bayer, 1956; Tixier-Durivault, 1987), in published keys to the order or family (see Bayer, 1981; Bayer & Stefani, 1989), and in routine taxonomic works (see Bayer, 1951; 1995; 1997; Utinomi, 1979; Williams, 1992; Cairns & Bayer, 2003). Currently 26 species occurring worldwide are attributed to the genus *Narella*.

5. In the course of a study of the western Atlantic deep-water octocorals (Cairns & Bayer, 2003; 2004 (in press)), the holotype of *Primnoa regularis* was examined and found not to be consistent with the accepted usage of the name, but instead to belong to an undescribed species in the genus *Paracalyptrophora* Kinoshita, 1908 (pp. 58, 63). Originally described as a subgenus of *Calyptrophora* by Kinoshita, *Paracalyptrophora* was elevated to generic status by Bayer (1981), and now consists of six species, including three species recently described by Cairns & Bayer (2004 (in press)). *Calyptrophora kerberti* Versluys, 1906 (p. 105) has been designated as the type species of *Paracalyptrophora* by Cairns & Bayer (2004). Recognition of the holotype of *Primnoa regularis* would result in the transfer of the six species currently placed in *Paracalyptrophora* to *Narella*, and the transfer of the 26 species currently placed in *Narella* to the next available junior synonym, *Calypterinus*, a name not employed for 107 years. This action would also obscure the morphological similarity and implied phylogenetic affinity between the two genera *Calyptrophora* Gray, 1866 and *Paracalyptrophora*.

6. In order to conserve the name *Narella regularis* and the genus name *Narella* in its current use, we propose that the holotype of *Primnoa regularis* be set aside, and a neotype be designated in accord with currently accepted use of the name, in accordance with Article 75.6 of the Code. The proposed neotype (USNM 49385) is from St. Vincent (Albatross-2752), not from the exact type locality of Guadeloupe but also in the Lesser Antilles, and is described and illustrated by Cairns & Bayer (2003). The specimen is consistent with the usage of this name by all subsequent authors, including Deichmann (1936), Grasshoff (1982) and Bayer (1956).

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Primnoa regularis* Duchassaing & Michelotti, 1860, and to designate the specimen USNM 49385 in the United States National Museum, Washington, D.C., as the neotype;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Narella* Gray, 1870 (gender: feminine), type species by monotypy *Primnoa regularis* Duchassaing & Michelotti, 1860;

- (b) *Paracalyptrophora* Kinoshita, 1908 (gender: feminine), type species by subsequent designation by Cairns & Bayer (2004) *Calyptraphora kerberti* Versluys, 1906;
- (3) to place on the Official List of Specific Names in Zoology the following names:
- (a) *regularis* Duchassaing & Michelotti, 1860, as published in the binomen *Primnoa regularis* and as defined by the neotype designated in (1) above (specific name of the type species of *Narella* Gray, 1870);
- (b) *kerberti* Versluys, 1906, as published in the binomen *Calyptraphora kerberti* (specific name of the type species of *Paracalyptrophora* Kinoshita, 1908).

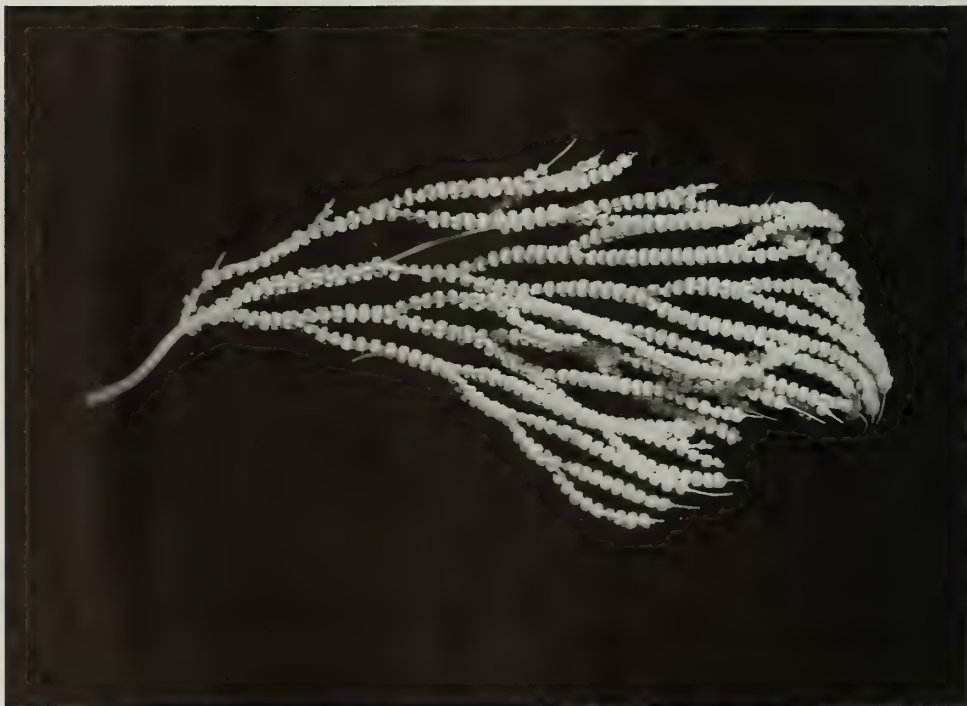
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Acknowledgement of receipt of this application was published in BZN **60**: 94.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).



Proposed neotype of *Primnoa regularis* Duchassaing & Michelotti, 1860. Albatross station 2752, USNM 49385, height 16 cm.

Case 999**F.A. Quenstedt's trinominal nomenclature (1845–1888): a proposal to stabilize the usage of the third names of ammonites and to place 34 important Quenstedt names of ammonites on the Official List of Specific Names in Zoology (Cephalopoda, Ammonoidea)**

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Abstract. The purpose of this application is to stabilize the usage of the third names of a number of ammonites established by F.A. Quenstedt (1845–1888) and to place 34 of his species-group names on the Official List. The problem has arisen from uncertainty as to whether Quenstedt's third names should be treated as subspecific, and therefore available, or as infrasubspecific and therefore unavailable under the Code. It is proposed that the Commission should rule that all Quenstedt's third names under the genus *Ammonites* are subspecific in rank and are therefore available names in the species group. It is also proposed that the Commission should rule that seven such third names that are junior homonyms, but are type species of genera or indices of standard chronostratigraphic Zones or Subzones, are not invalid by reason of being junior homonyms. It is proposed that these seven names, together with 27 other Quenstedt third names that are in current use as important zonal or subzonal index fossils or as type species of ammonite genera, are placed on the Official List of Specific Names in Zoology.

Keywords. Nomenclature; taxonomy; F.A. Quenstedt; trinominal nomenclature; ammonites; Jurassic.

1. A long-standing problem that has bedevilled the taxonomy of Jurassic ammonites arose from the introduction in 1845 of an idiosyncratic nomenclature by one of the major early contributors to the field, F.A. Quenstedt, working on the rich faunal successions of Swabia in southern Germany. It arose from his attempts in his morpho-descriptive taxonomy to differentiate between what he regarded as true species and what he thought were mere varieties within such species: what today we define as the distinction between taxa in the species group, whose nomenclature is governed by the provisions of the Code, and infrasubspecific taxa, which are not. His exposition of the difference between natural species and their variants was as clear in principle as one we would accept today, but its recognition in fossils has in practice to be subjective. Unfortunately, he chose to name his varietal taxa by the addition to

Linnaean specific binomina of third names having the same appearance as those for Linnaean subspecies. Moreover, he was not consistent in his application of the principles he had put forward. Nor did he state clearly case-by-case in which sense the third names were to be construed. The majority undoubtedly were intended to be varietal, and for this reason Quenstedt made no attempt to avoid homonymy within the genus *Ammonites*: the same third name could be used more than a dozen times, attached to different specific binomina. Subsequent revisers differed in their interpretations and as to what provisions of the Code should be applied; most revisers, who judged Quenstedt's trinominally named taxa to be specifically distinct, were faced with unending problems of homonymy, which were ignored in many cases, and the confusion has been vexing.

2. In July 1955 Prof Dr Helmut Hölder (then at the Institute and Museum of Geology and Palaeontology at the University of Tübingen, Germany) raised the problem of Quenstedt's ammonite nomenclature with the Commission's Secretary. Following correspondence, Professor Hölder outlined the problem in a paper published in *Paläontologische Zeitschrift* (Hölder, 1958) (an English translation of this paper made by Miss M.E. Lang in 1969 is available from the Commission's Secretariat). In this paper, Hölder proposed that Quenstedt's third names should, with a considerable number of exceptions for 'unique' names (i.e. those not pre-occupied and used only once by Quenstedt), be annulled on principle by being declared to be infrasubspecific, and therefore not available in the species group. For a number of reasons, including the intensive work then being done in formulating what was to become the first International Code of Zoological Nomenclature in 1960, no progress was made on Hölder's proposals, which have never been considered by the Commission. Hölder himself stated later (Hölder, 1972) that his proposals of 1958 were no longer entirely appropriate. It is now opportune for the case to be considered further under the provisions of the current (Fourth) Edition of the Code.

3. The Quenstedt works under consideration are *Petrefactenkunde Deutschlands*; *Die Cephalopoden* (1845–49), *Der Jura* (1856–57) and *Die Ammoniten des Schwäbischen Jura* (1882–88); details of these publications are given in the References at the end of this application. Quenstedt placed all his ammonites in the genus *Ammonites*, a name that was suppressed by the Commission (Opinion 305, December 1954) for the purposes of the Principle of Priority, but not for those of the Principle of Homonymy, and not as the root of names of higher categories above family-group level, e.g. Ammonitina. A general account of Quenstedt's system of trinomial nomenclature as applied to ammonites is being published by Callomon, Donovan & Howarth (2004): many examples of Quenstedt's names for ammonites are given there, and their varying usage by revising authors is discussed at some length. The aim of the present application is to stabilize the usage of all the third names that Quenstedt proposed for the genus *Ammonites*.

4. When Hölder submitted his proposals in the 1950s, zoological nomenclature was regulated by the *Règles Internationales de la Nomenclature Zoologique* of 1905, but the formulation of the International Code of Zoological Nomenclature in 1960, followed by revised versions up to the Fourth Edition in 1999, allows the problem to be solved in a meaningful way that is more in keeping with the actions of the many later authors who have used Quenstedt's names. Article 45.6.4 of the current Code allows some freedom in deciding whether a pre-1961 third name is subspecific (and

therefore an available name in the species group), or whether it is infrasubspecific (and therefore unavailable). Authors are required to consider the wording and intentions of the original author and interpret the status of the third name in an appropriate manner. Many later authors have used Quenstedt's third names as those of full species, and some of them have become the specific names of important index fossils of standard chronostratigraphic Zones and Subzones or type species of ammonite genera. Under the provisions of Article 45.6.4, such subsequent usage of Quenstedt's third names up to the end of 1984 has already given them species-group status, dating from their first proposal by Quenstedt. Article 45.6.4.1 states that 'a name that is infrasubspecific under Article 45.6.4 is nevertheless deemed to be subspecific from its original publication if, before 1985, it was either adopted as the valid name of a species or subspecies or was treated as a senior homonym'. This has stabilized the many past usages of Quenstedt third names as valid species-group names, and it is the purpose of the present application to extend this to all Quenstedt's third names. All were proposed under the genus *Ammonites*, and their stabilization as species-group names implies that they will now come under the provisions of the Principle of Homonymy. Some of them are junior homonyms of earlier uses of the same specific name in the genus *Ammonites*. To resolve the homonymy, such names would have to be replaced when required by a replacement name bearing new authorship and date (e.g. *Amaltheus nodifer* Buckman, 1911, a replacement name for *Ammonites amaltheus depressus* Quenstedt, 1856, *non Ammonites depressa* Bruguière, 1789), or by their taxa being subsumed into older species as junior synonyms. In the cases of type species of genera or index species of Zones and Subzones, such changes would require major changes of deeply established names and usages, whose importance ranges widely outside the local purview of specific taxonomy.

5. We therefore propose that the Commission should rule that all the third names placed in the genus *Ammonites* in the three works of Quenstedt (1845–49; 1856–57; 1882–88) listed in the references below, are subspecific names of the species group, have availability and status dating from Quenstedt's first usage, and are available to be raised to full specific rank where such action is considered to be appropriate by a revising author. They would then be subject to the provisions of the Principle of Homonymy. This proposal does not apply to any of Quenstedt's fourth names, of which a few were proposed in the genus *Ammonites*. These are already covered by a sentence in Article 45.5, which states that all fourth names are infrasubspecific, and are therefore not available names in the species group. A consequence of these proposals is that any of Quenstedt's third names that are homonyms of existing species-group names in the genus *Ammonites* proposed earlier either by Quenstedt himself or by other authors, are junior homonyms, and need to be replaced if they are to be used subsequently. However, a number of important Quenstedt third names that are junior homonyms should be conserved on the grounds that they are type species of genera or are indices of chronostratigraphic Zones and Subzones. Details of such third names are given in List A. Under Article 67.1.2 'the name of a type species remains unchanged even when it is a junior synonym or homonym'; nevertheless, and particularly since one name is that of a zonal index, we propose that the Commission should rule that all the third names in this list are not invalid by reason of being junior homonyms and are available as species-group names from the dates of their first use by Quenstedt.

LIST A

Pre-occupied Quenstedt third names that are to be conserved as valid species-group names by a ruling under the plenary power that they are not invalid by reason of being junior homonyms, being either type species of genera or indices of standard chronostratigraphic Zones or Subzones:

- albus*, *Ammonites anceps*, Quenstedt, 1857, p. 617; type species, by original designation, of *Ilovaiskioceras* Sazonov, 1960 [non *Ammonites canaliculatus albus* Quenstedt, 1846; nec *Ammonites triplicatus albus* Quenstedt, 1846].
- anceps*, *Ammonites contractus*, Quenstedt, 1886, p. 521; type species, by original designation, of *Epalxites* Mascke, 1907 [non *Ammonites anceps* (Reinecke) Zieten, 1830 (= *Nautilus anceps* Reinecke, 1818)].
- bifurcatus*, *Ammonites biplex*, Quenstedt, 1846, p. 163; type species, by subsequent designation by Spath (1931), of *Divisosphinctes* Beurlen, 1925 (= *Dichotomoceras* Buckman, 1919, subj., Enay 1966); index of Bifurcatus Zone, Middle Oxfordian [non *Ammonites bifurcata* Bruguière, 1789; nec *Ammonites bifurcatus* de Roissy, 1805; nec *Ammonites bifurcatus* Schlotheim, 1820; nec *Ammonites parkinsoni bifurcatus* Quenstedt, 1846].
- macer*, *Ammonites humphriesianus*, Quenstedt, 1886, p. 528; type species, by original designation, of *Skirroceras* Mascke, 1907 [non *Ammonites brevidorsalis macer* Quenstedt, 1883; nec *Ammonites bucklandi macer* Quenstedt, 1883; nec *Ammonites baculatus macer* Quenstedt, 1886].
- numismalis*, *Ammonites heterophyllus*, Quenstedt, 1845, p. 100; type species, by subsequent designation by Buckman (1912), of *Tragophylloceras* Hyatt, 1900 [non *Ammonites numismalis* Steininger, 1831].
- obtusus*, *Ammonites munchisonae*, Quenstedt, 1846, p. 116; type species, by subsequent designation by Buckman (1899), of *Cosmogyrria* Buckman, 1898 (= *Ludwigia* Bayle, 1878, subj.) [non *Ammonites obtusus* J. Sowerby, 1817].
- ovalis*, *Ammonites sowerbyi*, Quenstedt, 1886, p. 488; the zonal index species of the *Sonninia ovalis* Zone, Lower Bajocian [non *Ammonites alternans ovalis* Quenstedt, 1845 (= *Amoeboceras ovalis* (Quenstedt, 1845)); nec *Ammonites psilonotus ovalis* Quenstedt, 1882; nec *Ammonites insignis ovalis* Quenstedt, 1885].

6. List B shows details of Quenstedt's third names that are names of type species of genera, and List C gives details of Quenstedt's second names (ie. normal specific names in binominal combination) that are names of type species of genera or of indices of chronostratigraphic Zones and Subzones. None of the third names in List B nor the second names in List C are pre-occupied in the genus *Ammonites*. We propose that the Commission should place all the Quenstedt third names in Lists A and B, and the Quenstedt second names in List C, on the Official List of Specific Names, with the exception of *oxynotus*, *Ammonites* and *polymorphus*, *Ammonites*, which are already on the Official List (Opinion 575, December 1959).

LIST B

Quenstedt third names that are not pre-occupied and are names of type species of genera:

- circumspinosus*, *Ammonites inflatus*, Quenstedt, 1857, p. 609 (= *Amm. circumspinosus* Oppel, 1863 (subj.)); type species, by original designation, of *Physodoceras* Hyatt, 1900.

- longidens*, *Ammonites parkinsoni*, Quenstedt, 1886, p. 592; type species, by monotypy, of *Odontolkites* Buckman, 1925 (= *Garantiana* Mascke, 1907; subj.).
- parinodus*, *Ammonites striatus*, Quenstedt, 1884, p. 227; type species, by original designation, of *Parinodiceras* Trueman, 1918.
- ruga*, *Ammonites armatus*, Quenstedt, 1884, p. 206; type species, by original designation, of *Hyperderoceras* Spath, 1926.
- tegulatus*, *Ammonites pictus*, Quenstedt, 1887, p. 1051; type species, by original designation, of *Taramelliceras* (*Strebliticeras*) Hölder, 1955.
- tortus*, *Ammonites lineatus*, Quenstedt, 1885, p. 309; type species, by subsequent designation by Spath (1924), of *Derolytoceras* Rosenberg, 1909.
- unispinosus*, *Ammonites athleta*, Quenstedt, 1847 p. 190; type species, by original designation, of *Unipeltoceras* Jeannel, 1951.

LIST C

Quenstedt second names that are names of type species of genera or indices of chronostratigraphic Zones or Subzones, and are not pre-occupied:

- arenatus*, *Ammonites*, Quenstedt, 1886, p. 482; type species by monotypy of *Prepapillites* Buckman, 1927.
- baculatus*, *Ammonites*, Quenstedt, 1857, p. 402; type species by original designation of *Baculatoceras* Mascke, 1907 (non *Hamites baculatus* Quenstedt, 1857, p. 403; type species of *Apsoroceras* Hyatt, 1900).
- bidentosus*, *Ammonites*, Quenstedt, 1857; type species by original designation of *Trochiskioceras* Schairer & Schlamp, 1991.
- bifer*, *Ammonites*, Quenstedt, 1843, p. 160; type species by original designation of *Bifericeras* Buckman, 1913.
- bimammatus*, *Ammonites*, Quenstedt, 1857, p. 616; type species by original designation of *Epipeltoceras* Spath, 1924; type genus of EPIPELTOCERATINAE Donovan, Callomon & Howarth, 1981; index of the *Epipeltoceras bimammatum* Zone, Submediterranean Upper Oxfordian.
- biruncinatus*, *Ammonites*, Quenstedt, 1847, p. 260; type species by subsequent designation by Fischer (1882) of *Simoceras* Zittel, 1870.
- confusus*, *Ammonites*, Quenstedt, 1856, p. 127; type species by subsequent designation by Buckman (1924) of *Microceras* Hyatt, 1867 (non *Microceras* Hall, 1845 (Gastropoda)) (= *Hemimicroceras* Spath, 1925; subj.); type genus of MICROCERATINAE Spath, 1926 (= EODEROCERATINAE Spath, 1929; subj.).
- fasciatus*, *Ammonites*, Quenstedt, 1848, p. 271; type species by original designation of *Lytogyroceras* Spath, 1925.
- ibex*, *Ammonites*, Quenstedt, 1843, p. 179; index species of *Tragophylloceras ibex* Zone, Pliensbachian.
- involutus*, *Ammonites*, Quenstedt, 1846, p. 165; type species by subsequent designation by Spath (1931) of *Involuticeras* Salfeld, 1913.
- laqueus*, *Ammonites*, Quenstedt, 1856, p. 43; index species of *Alsatites laqueus* Subzone, Liasicus Zone, Hettangian.
- latisulcatus*, *Ammonites*, Quenstedt, 1883, p. 85; type species by original designation of *Epammonites* Spath, 1922.
- microbiplex*, *Ammonites*, Quenstedt, 1887, p. 876; type species by original designation of *Microbiplices* Arkell, 1936.

- nodostrictus*, *Ammonites*, Quenstedt, 1885, p. 264; type species by original designation of *Holcolytoceras* Spath, 1924.
- nodulatus*, *Ammonites*, Quenstedt, 1888, p. 981; type species by original designation of *Presimoceras* Sarti, 1990.
- oxynotus*, *Ammonites*, Quenstedt, 1843, p. 161; type species by subsequent designation by Buckman (1909) of *Oxynoticeras* Hyatt, 1875; type genus of OXYNOTICERATIDAE Hyatt, 1875, index species of *Oxynoticeras oxynotum* Zone, Sinemurian (name already on Official List).
- pettos*, *Ammonites*, Quenstedt, 1843, p. 178; type species by subsequent designation by Buckman (1898) of *Coeloceras* Hyatt, 1867.
- planarmatus*, *Ammonites*, Quenstedt, 1856, p. 153; type species by original designation of *Parahyperderoceras* Schlatter, 1980 (as subgenus of *Hyperderoceras* Spath, 1926).
- polymorphus*, *Ammonites*, Quenstedt, 1845, p. 86; type species by subsequent designation by Buckman (1892) of *Polymorphites* Haug, 1887; type genus of POLYMORPHITIDAE Hyatt, 1887; index species of *Polymorphites polymorphus* Subzone, Jamesoni Zone, Pliensbachian (name already on Official List).
- septenarius*, *Ammonites*, Quenstedt, 1857, p. 614; type species by original designation of *Ceratosphinctes* Ziegler, 1959.
- spiratissimus*, *Ammonites*, Quenstedt, 1851, p. 355; type species by subsequent designation by Spath (1924) of *Vermiceras* Hyatt, 1889.
- transversarius*, *Ammonites*, Quenstedt, 1847, p. 199; type species by original designation of *Gregoryceras* Spath, 1924; index species of *Gregoryceras transversarium* Zone, Middle Oxfordian.

7. These proposals relate only to the names proposed by Quenstedt in the genus *Ammonites* and do not affect any other systematic group.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

(a) to rule that all the third names published in combination with the genus *Ammonites* by Quenstedt in the three works (1845–49; 1856–57; 1882–88) listed in the references below are subspecific names of the species group, have availability and status dating from Quenstedt's first usage, and can be raised to full specific rank under the Principle of Coordination (Article 46) where such action is considered to be appropriate by a revising author;

(b) to rule that the following third names are not invalid by reason of being junior homonyms:

- (1) *albus*, *Ammonites anceps*, Quenstedt, 1857;
- (2) *anceps*, *Ammonites contractus*, Quenstedt, 1886;
- (3) *bifurcatus*, *Ammonites biplex*, Quenstedt, 1846;
- (4) *macer*, *Ammonites humphriesianus*, Quenstedt, 1886;
- (5) *numismalis*, *Ammonites heterophyllus*, Quenstedt, 1845;
- (6) *obtus*, *Ammonites murchisonae*, Quenstedt, 1846;
- (7) *ovalis*, *Ammonites sowerbyi*, Quenstedt, 1886;

- (2) to place on the Official List of Specific Names in Zoology the following names:
- (a) *albus*, *Ammonites anceps*, Quenstedt, 1857 (specific name of the type species of *Ilovaiskioceras* Sazonov, 1960);
 - (b) *anceps*, *Ammonites contractus*, Quenstedt, 1886 (specific name of the type species of *Epalxites* Mascke, 1907);
 - (c) *arenatus*, *Ammonites*, Quenstedt, 1886 (specific name of the type species of *Prepapillites* Buckman, 1927);
 - (d) *baculatus*, *Ammonites*, Quenstedt, 1857 (specific name of the type species of *Baculatoceras* Mascke, 1907);
 - (e) *bidentosus*, *Ammonites*, Quenstedt, 1857 (specific name of the type species of *Trochiskioceras* Schairer & Schlamp, 1991);
 - (f) *bifer*, *Ammonites*, Quenstedt, 1843 (specific name of the type species of *Bifericeras* Buckman, 1913);
 - (g) *bifurcatus*, *Ammonites biplex*, Quenstedt, 1846 (specific name of the type species of *Divisosphinctes* Beurlen, 1925);
 - (h) *bimammatus*, *Ammonites*, Quenstedt, 1857 (specific name of the type species of *Epipeltoceras* Spath, 1924);
 - (i) *biruncinatus*, *Ammonites*, Quenstedt, 1847 (specific name of the type species of *Simoceras* Zittel, 1870);
 - (j) *circumspinosus*, *Ammonites inflatus*, Quenstedt, 1857 (senior subjective synonym of *Ammonites circumspinosus* Oppel, 1863; specific name of the type species of *Physodoceras* Hyatt, 1900);
 - (k) *confusus*, *Ammonites*, Quenstedt, 1856 (specific name of the type species of *Microceras* Hyatt, 1867);
 - (l) *fasciatus*, *Ammonites*, Quenstedt, 1848 (specific name of the type species of *Lytogyroceras* Spath, 1925);
 - (m) *ibex*, *Ammonites*, Quenstedt, 1843;
 - (n) *involutus*, *Ammonites*, Quenstedt, 1846 (specific name of the type species of *Involuticeras* Salfeld, 1913);
 - (o) *laqueus*, *Ammonites*, Quenstedt, 1856;
 - (p) *latisulcatus*, *Ammonites*, Quenstedt, 1883 (specific name of the type species of *Epammonites* Spath, 1922);
 - (q) *longidens*, *Ammonites parkinsoni*, Quenstedt, 1886 (specific name of the type species of *Odontolkites* Buckman, 1925);
 - (r) *macer*, *Ammonites humphriesianus*, Quenstedt, 1886 (specific name of the type species of *Skirroceras* Mascke, 1907);
 - (s) *microbiplex*, *Ammonites*, Quenstedt, 1887 (specific name of the type species of *Microbiplices* Arkell, 1936);
 - (t) *nodostrictus*, *Ammonites*, Quenstedt, 1885 (specific name of the type species of *Holcolytoceras* Spath, 1924);
 - (u) *nodulatus*, *Ammonites*, Quenstedt, 1888 (specific name of the type species of *Presimoceras* Sarti, 1990);
 - (v) *numismalis*, *Ammonites heterophyllus*, Quenstedt, 1845 (specific name of the type species of *Tragophylloceras* Hyatt, 1900);
 - (w) *obtus*, *Ammonites murchisonae*, Quenstedt, 1846 (specific name of the type species of *Cosmogyria* Buckman, 1898);
 - (x) *ovalis*, *Ammonites sowerbyi*, Quenstedt, 1886;

- (y) *parinodus*, *Ammonites striatus*, Quenstedt, 1884 (specific name of the type species of *Parinodiceras* Trueman, 1918);
- (z) *pettos*, *Ammonites*, Quenstedt, 1843 (specific name of the type species of *Coeloceras* Hyatt, 1867);
- (aa) *planarmatus*, *Ammonites*, Quenstedt, 1856 (specific name of the type species of *Parahyperderoceras* Schlatter, 1980);
- (bb) *ruga*, *Ammonites armatus*, Quenstedt, 1884 (specific name of the type species of *Hyperderoceras* Spath, 1926);
- (cc) *septenarius*, *Ammonites*, Quenstedt, 1857 (specific name of the type species of *Ceratosphinctes* Ziegler, 1959);
- (dd) *spiratissimus*, *Ammonites*, Quenstedt, 1851 (specific name of the type species of *Vermiceras* Hyatt, 1889);
- (ee) *tegulatus*, *Ammonites pictus*, Quenstedt, 1887 (specific name of the type species of *Taramelliceras* (*Strebliticeras*) Hölder, 1955);
- (ff) *tortus*, *Ammonites lineatus*, Quenstedt, 1885 (specific name of the type species of *Derolytoceras* Rosenberg, 1909);
- (gg) *transversarius*, *Ammonites*, Quenstedt, 1847 (specific name of the type species of *Gregoryceras* Spath, 1924);
- (hh) *unispinosus*, *Ammonites athleta*, Quenstedt, 1847 (specific name of the type species of *Unipeltoceras* Jeannet, 1951).

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Copies of the paper by Callomon, Donovan & Howarth to be published in *Palaeontology* (2004, vol. 47) can be obtained from the I.C.Z.N. Executive Secretary (e-mail: iczn@nhm.ac.uk).

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3263***Octopus hummelincki* Adam, 1936 (Mollusca, Cephalopoda): proposed conservation of the specific name**

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Abstract. The purpose of this application, in relation to Article 23.9.3 of the Code, is the conservation of the name *Octopus hummelincki* Adam, 1936 for a common small ocellate octopus from the Caribbean and western Atlantic. The older name *O. filusus* Howell, 1868 was long regarded as a synonym of *O. vulgaris* Cuvier, 1797, but more recently has been synonymized with *O. hummelincki* (rather than *O. vulgaris*). The name *O. filusus* has had very little usage and as its synonymy is in some doubt, its suppression is proposed to conserve the general and long usage of *O. hummelincki*.

Keywords. Nomenclature; taxonomy; Cephalopoda; OCTOPODIDAE; *Octopus hummelincki*; *Octopus filusus*.

1. The name *Octopus filusus* Howell, 1868 (p. 240, pl. 14; originally spelled *O. filosa*) was proposed for a small octopus from 'along the coast of Santa Cruz Island', and was chosen for the 'remarkable long and thread-like terminations to the arms'. Howell gave detailed measurements of the body and arms of the largest specimen he had seen, and he included a somewhat cryptic statement that the species 'changes the color of its spots with great rapidity'. This specimen is deposited in the Academy of Natural Sciences of Philadelphia; it is a female (Voss & Toll, 1998, p. 464; pers. obs.).

2. In his catalogue of recent Cephalopoda, Hoyle (1886) listed under each of all the then-known species an abbreviated bibliographic reference and a locality, categorized according to one of 17 regions. For *Octopus filusus* the locality given on p. 220 (with no further explanation) was 'West Indian Region'. Hoyle's interpretation of the locality was perhaps influenced by the fact that, in the same paper as the description of *O. filusus*, Howell (1868) had described a new species of squid, *Loligo hemiptera*, from 'the Gulf of Mexico and along the Florida coast'. Subsequent authors have followed Hoyle and, with some doubts, have assumed the locality of *O. filusus* to be in the eastern Caribbean. Robson (1929, p. 146) repeated Howell's original description, apparently without inspecting the type specimen, and listed *O. filusus* as an 'unclassified form' that was only known from Howell's work. He noted 'there are several 'Santa Cruz' islands, mostly in the Pacific. I suspect, however, that the West Indian Island of that name [St. Croix in the Virgin Islands] is meant'.

3. Adam (1936, p. 2) described a male and two females in the Zoological Museum of Amsterdam as the syntypes of a new nominal species, *Octopus hummelincki*, characterized in particular by a pair of ocelli 'situés entre les yeux et le bord de la membrane interbranchiale, plus proches des yeux que du bord de la membrane'. Detailed measurements were given of the male and one of the females, which

had been collected in shallow water (1.0–1.5 m) among coral at Bonaire in the Caribbean Lesser Antilles. The species was named after the collector, P. Wagenaar Hummelinck. The description of these specimens was expanded the following year (Adam, 1937, p. 25).

4. In a review of the octopus species of the Western Atlantic, Pickford (1945, pp. 709, 714, 728, 729) stated that Howell's *O. filusus* was a junior synonym of *O. vulgaris* Cuvier, 1797. In the same paper *O. hummelincki* was described (p. 747) as 'the only ocellate species of octopod known from the Atlantic'; it is a common littoral species throughout the Caribbean (Rees, 1950, p. 108). Pickford (1946, p. 422) again synonymized *O. filusus* and *O. vulgaris*; her revised key to the littoral Octopoda of the western Atlantic included (pp. 413–414) both *O. vulgaris* and *O. hummelincki*, with no mention of *O. filusus*.

5. Voss (1962, p. 3) examined Howell's original specimen of *O. filusus* (see para. 1 above), and concluded that it was conspecific with *O. hummelincki* and not with *O. vulgaris*. He stated that 'the use by Pickford of this name [*filusus*] in her 1945 paper and by Robson in 1929 prevents the invocation of the 50-year rule, and *hummelincki* must now be placed in the synonymy of *filusus* Howell'. In this remark Voss was mistaken: the rule in question (Article 23b of the 1961 Code) stated that a name which had not been used as a senior synonym (i.e. had not been used, rather than a younger synonym, as the valid name of a taxon) within the past 50 years must not be reintroduced. Only Robson had used *filusus* as the valid name for a recognized taxonomic species (see above) so, in accordance with the provision, Voss should have rejected *O. filusus* as a nomen oblitum. In later papers, Voss did indeed retain the use of *O. hummelincki* (see Voss & Solis Ramirez, 1966, p. 622; Voss, 1968, p. 656; Voss, 1971, p. 5). Burgess (1966) listed *O. filusus* as a rejected senior synonym of *O. hummelincki* but did not explicitly invoke the Code rule.

6. Toll (1990, p. 26) drew attention to the paper of Voss (1962) identifying *O. filusus* and *O. hummelincki* as synonyms. He cited several references, including the papers mentioned above by Robson (1929), Pickford (1945, 1946) and Burgess (1966), as 'usages' of the name *O. filusus*, but of these only Voss (1962) had in fact claimed *filusus* to be the valid synonym of *hummelincki* and only he and Robson (1929) had used the name *filusus* for a taxon in describing Howell's holotype. Apart from Toll (in Voss & Toll, 1998, p. 464), only two other authors have since adopted the name *O. filusus* in place of *O. hummelincki* (presumably in deference to Toll, 1990), and then only as brief mentions in synoptic studies involving many other species: these are Voight (1991, p. 243; 1993a, p. 354; 1993b, p. 221; 1994, p. 493) and Norman (2000, p. 273). In none of these accounts is there any discussion or new information on the biology of the species in question. In contrast the name *O. hummelincki* has been and remains in very wide use, and the Commission Secretariat has been given a list of 20 representative references.

7. I have recently drawn attention (Gleadall, 2002, p. 78) to the erroneous nomenclatural interpretations of Toll (1990) and the case, on the grounds of usage, for the conservation of the name *O. hummelincki* by the Commission. There are two additional factors that have encouraged the present application: first, doubt concerning the type locality of *O. filusus* and, secondly, doubt that the name *O. filusus* was given to an ocellate species.

8. Doubt about the type locality is such that *O. filusus* could be either a Pacific or an Atlantic species. The opinions of Hoyle (1886) and Robson (1929) (see para. 2 above) on the type locality appear to have been accepted and the type locality changed to the West Indian 'St. Croix' rather than the original 'Santa Cruz'. Unfortunately, recent enquiries of the staff at the Academy of Natural Sciences of Philadelphia have produced no new information about the original locality of *O. filusus*. There is an ocellate species of octopus in the eastern Pacific, *Octopus oculifer* Hoyle, 1904 (p. 14), which is a morphologically very similar (geminant) species to the Atlantic *O. hummelincki* (see Voight, 1988). If the type locality of *O. filusus* should later be shown to have been, in fact, one of the Santa Cruz islands of the eastern Pacific (e.g. off the coast of California), then *O. filusus* is likely to be a synonym of *O. oculifer* rather than of *O. hummelincki*. In this event the usage of the name *O. oculifer* for the Pacific taxon should be maintained in accordance with the Code.

9. The holotype of *O. filusus* and two of the syntypes of *O. hummelincki* have been obtained on loan and re-examined. The syntypes are in excellent condition and there are no doubts about anything concerning the description of *O. hummelincki*. Unfortunately, the same cannot be said for *O. filusus*. The condition of the holotype is very poor: it is devoid of skin over most of its surface. The identification of *O. filusus* as a synonym of *O. hummelincki* rests largely on the presence or absence of a pair of ocelli on the skin of the arm bases. My recent inspection reveals that there is nothing resembling an ocellus on the right side, and on the left there is merely a vague blemish, visible only with the aid of a microscope. This blemish could either be the remains of an ocellus or an artifact of damage to the deteriorating skin. If this specimen had no ocelli then *O. filusus* is not synonymous with *O. hummelincki*.

10. The name *O. filusus* Howell, 1868 is essentially unused and its identity has been, and remains, in doubt, whereas its synonym *O. hummelincki* Adam, 1936 has been in wide use for nearly 70 years. It is unlikely that the name *O. filusus* refers to an otherwise undiscovered taxon and I recommend that it should be suppressed.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *filusus* Howell, 1868, as published in the binomen *Octopus filusus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *hummelincki* Adam, 1936, as published in the binomen *Octopus hummelincki*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *filusus* Howell, 1868, as published in the binomen *Octopus filusus* and as suppressed in (1) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3287

LABIIDAE Burr, 1909 (Insecta, Dermaptera): proposed precedence over ISOLABELLINAE Verhoeff, 1902

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the usage of the family-group name LABIIDAE Burr, 1909 for a widely encountered group of cosmopolitan earwigs. The senior subfamilial name ISOLABELLINAE Verhoeff, 1902 (type genus *Isolabella* Verhoeff, 1902) has not been used since its establishment over 100 years ago, while the junior name LABIIDAE (type genus *Labia* Leach, 1815) has become universally accepted, often at subfamily rank (LABIINAE). It is proposed that the name LABIIDAE be given precedence over ISOLABELLINAE whenever their type genera are placed in the same family-group taxon.

Keywords. Nomenclature; taxonomy; Dermaptera; LABIIDAE; ISOLABELLINAE; *Isolabella*; *Labia*; earwigs.

1. Leach (1815, p. 118) established the generic name *Labia* for a group of common earwigs. The type species of *Labia* is *Forficula minor* Linnaeus, 1758 (p. 423) by monotypy. *Labia* and its type species have been placed on the Official Lists (Opinion 149).

2. Verhoeff (1902, p. 15) established the generic name *Isolabella*, placing it in a new subfamily ISOLABELLINAE (p. 15) of the family CHELIDURIDAE. The type species of *Isolabella* is *I. graeca* Verhoeff, 1902 (p. 16) by monotypy.

3. Burr (1909, p. 323), in a brief review of earwig classification, established the familial name LABIIDAE to accommodate *Labia* and several genera allied to it.

4. Steinmann (1989, p. 513) placed *Isolabella* in the subfamily LABIINAE (family LABIIDAE) along with *Labia* and its relatives.

5. The name ISOLABELLINAE has not been used since its original proposal in 1902 while the junior name LABIIDAE (OR LABIINAE) has become universally used as the name for *Labia* and its relatives. The family-group name based on *Labia* has been used either at familial or subfamilial rank in an extensive systematic and biological literature for more than the last 80 years; the Commission Secretariat holds 16 representative references published by 20 authors between 1990 and 2001 (e.g. Albouy & Caussanel, 1990; Briceño & Eberhard, 1995; Popham, 2000; Fedor & Majzlan, 2001).

6. To use the name ISOLABELLINAE in place of its junior synonym LABIIDAE (OR LABIINAE) would bring about a change in name for one of the most commonly encountered and widely cited groups of earwigs. I therefore propose that family-group names based on *Labia* be given precedence over those based on *Isolabella*. The family-group name based on *Isolabella* would remain available for any entomologist who may in the future consider the two genera to belong to different family-group taxa.

7. The International Commission on Zoological Nomenclature is accordingly asked:
- (1) to use its plenary power to rule that the family-group name LABIIDAE Burr, 1909 and other family-group names based on *Labia* Leach, 1815 are to be given precedence over ISOLABELLINAE Verhoeff, 1902 and other family-group names based on *Isolabella* Verhoeff, 1902 whenever their type genera are placed in the same family-group taxon;
 - (2) to place on the Official List of Generic Names in Zoology the name *Isolabella* Verhoeff, 1902 (gender: feminine), type species by monotypy *Isolabella graeca* Verhoeff, 1902;
 - (3) to place on the Official List of Specific Names in Zoology the name *graeca* Verhoeff, 1902, as published in the binomen *Isolabella graeca* (specific name of the type species of *Isolabella* Verhoeff, 1902);
 - (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) LABIIDAE Burr, 1909 (type genus *Labia* Leach, 1815), with the endorsement that it and other family-group names based on *Labia* are to be given precedence over ISOLABELLINAE Verhoeff, 1902 and other family-group names based on *Isolabella* Verhoeff, 1902 whenever their type genera are placed in the same family-group taxon;
 - (b) ISOLABELLINAE Verhoeff, 1902 (type genus *Isolabella* Verhoeff, 1902), with the endorsement that it and other family-group names based on *Isolabella* are not to be given priority over LABIIDAE Burr, 1909 and other family-group names based on *Labia* Leach, 1815 whenever their type genera are placed in the same family-group taxon.

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Case 3265

Lathrobium geminum* Kraatz, 1857 (Insecta, Coleoptera): proposed precedence over *L. volgense* Hochhuth, 1851 and *L. boreale* Hochhuth, 1851; *L. volgense*: proposed precedence over *L. boreale

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Abstract. This application is brought to the Commission under Articles 23.9.3 and 81.2.3 of the Code. Four names (*Lathrobium bicolor* Heer, 1839, *L. boreale* Hochhuth, 1851, *L. volgense* Hochhuth, 1851 and *L. geminum* Kraatz, 1857) have been applied validly or invalidly to a species of rove beetle (family STAPHYLINIDAE). *Lathrobium bicolor* Heer, 1839 is an invalid name as it is a junior primary homonym of *L. bicolor* Gravenhorst, 1802. *Lathrobium volgense* is an invalid name because (as a result of a First Reviser's action) it is a junior synonym of *L. boreale*, but it has had more usage than *L. boreale*. To stabilize the name of this rove beetle, it is proposed that the widely used name *L. geminum* be given precedence over the less well used, but senior, names *L. boreale* and *L. volgense*, whenever it and either of the senior names are considered to be synonyms. It is also proposed that *L. volgense* be given precedence over the less well used, but senior, name *L. boreale*, whenever the two are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Lathrobium boreale*; *Lathrobium volgense*; *Lathrobium geminum*; rove beetles.

1. Three names (*Lathrobium bicolor* Heer, 1839 (p. 240), *L. boreale* Hochhuth, 1851 (p. 41), *L. volgense* Hochhuth, 1851 (p. 42)) have been applied at various times (either validly or invalidly) to the species of rove beetle (family STAPHYLINIDAE) that was named *Lathrobium geminum* by Kraatz in 1857 (p. 673). The oldest name, *L. bicolor* Heer, 1839, is invalid because it is a junior primary homonym of *L. bicolor* Gravenhorst, 1802 (p. 179; currently *Hommaeotarsus bicolor*). Since 1868 *L. bicolor* Heer has been cited as a synonym of *Lathrobium boreale* Hochhuth, 1851 (see Gemminger & Harold, 1868, p. 609) or *L. geminum* Kraatz, 1857 (see Fauvel, 1873, p. 343).

2. *Lathrobium boreale* Hochhuth, 1851 was considered to be valid until 1998. However confusion over the use of *Lathrobium boreale* Thomson, 1860 (p. 198) and *L. boreale* Hochhuth, 1851 caused Assing & Zerche (1998, p. 136) to cite, for the first time, the Hochhuth name as a synonym of *L. volgense* Hochhuth when it was the Thomson name that had been cited as a synonym of *L. volgense* (see Burakowski et al., 1979, p. 241; Boháč, 1986, p. 380). Probably as a result of this misunderstanding only 4 authors in 7 works since 1992 have cited *L. boreale* Hochhuth as valid (the Commission Secretariat holds these usage references).

3. Most authors (see Kraatz, 1867, p. 414; Gemminger & Harold, 1868, p. 609; Gusarov, 1992, p. 784) cited *L. volgense* Hochhuth, 1851 as a variety or synonym of *L. boreale* Hochhuth, 1851 following the action of the First Reviser (Fauvel, 1865, p. 16; also see Article 24.2), or as a synonym of *L. geminum* Kraatz (see for example Ganglbauer, 1895, p. 511; Pope, 1977, p. 27; the Commission Secretariat holds a list of other usage references). Recently (see Burakowski et al., 1979, p. 241), *L. volgense* was resurrected to replace *L. geminum*, and in the last 50 years it has been cited as a valid name in 28 works by 23 authors (the Commission Secretariat holds these usage references).

4. *Lathrobium geminum* Kraatz has a long history of use as a valid name, but has been invalidly cited as a senior synonym of *L. boreale* Hochhuth or *L. volgense* (the Commission Secretariat holds these usage references). In the last 50 years, *L. geminum* has been cited as the valid name in at least 37 works by 33 authors (the Commission Secretariat holds these usage references).

5. As has been shown in paras. 1–4 above, the nomenclature of this rove beetle species is confusing and unstable because four names have been applied to the species in the last 50 years. Twenty-five of the references that cite *L. volgense* as the valid name were published in the last 16 years; prior to 1953 the name was unused. *Lathrobium boreale* Hochhuth, the name that actually has validity for this species under the provisions of the Code (see Article 24.2), has been used only a few times in the last 50 years. *Lathrobium geminum*, on the other hand, has been used by many authors in many works since 1857 and was used as recently as 2001 by Tamutis & Zolubas (p. 67). To conserve the widespread usage of *L. geminum*, this case is submitted to the Commission under Articles 23.9.3 and 81.2.3 to give it precedence over its supposed synonyms. Full suppression of names is not proposed in case future work reveals that more than one rove beetle species is involved in what we currently understand to be a single species.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

- (a) to give the name *geminum* Kraatz, 1857, as published in the binomen *Lathrobium geminum*, precedence over the names *boreale* Hochhuth, 1851, as published in the binomen *Lathrobium boreale*, and *volgense* Hochhuth, 1851, as published in the binomen *Lathrobium volgense*, whenever it and either of the others are considered to be synonyms;
- (b) to give the name *volgense* Hochhuth, 1851, as published in the binomen *Lathrobium volgense*, precedence over the name *boreale* Hochhuth, 1851, as published in the binomen *Lathrobium boreale*, whenever the two are considered to be synonyms;

(2) to place on the Official List of Specific Names in Zoology the following names:

- (a) *geminum* Kraatz, 1857, as published in the binomen *Lathrobium geminum*, with the endorsement that it is to be given precedence over the names *boreale* Hochhuth, 1851, as published in the binomen *Lathrobium boreale*, and *volgense* Hochhuth, 1851, as published in the binomen *Lathrobium volgense*, whenever it and either of the others are considered to be synonyms;

- (b) *volgense* Hochhuth, 1851, as published in the binomen *Lathrobium volgense*, with the endorsement that it is to be given precedence over the name *boreale* Hochhuth, 1851, as published in the binomen *Lathrobium boreale*, whenever the two are considered to be synonyms and that it is not to be given priority over *geminum* Kraatz, 1857, as published in the binomen *Lathrobium geminum*, whenever the two are considered to be synonyms;
- (c) *boreale* Hochhuth, 1851, as published in the binomen *Lathrobium boreale*, with the endorsement that it is not to be given priority over the names *geminum* Kraatz, 1857, as published in the binomen *Lathrobium geminum* and *volgense* Hochhuth, 1851, as published in the binomen *Lathrobium volgense*, whenever it and either of the others are considered to be synonyms;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *bicolor* Heer, 1839, as published in the binomen *Lathrobium bicolor* (a junior homonym of *Lathrobium bicolor* Gravenhorst, 1802).

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Case 3283

***Cetonia albopicta* Gory & Percheron, 1833 (currently *Trichostetha albopicta*) and *Cetonia albopicta* Motschulsky, 1845 (currently *Oxythyrea albopicta*) (Insecta, Coleoptera): proposed conservation of the specific names**

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Abstract. The purpose of this application, under Article 23.9.5 of the Code, is to conserve the specific names *Cetonia albopicta* Gory & Percheron, 1833 (currently *Trichostetha albopicta*) and *Cetonia albopicta* Motschulsky, 1845 (currently *Oxythyrea albopicta*) (SCARABAEIDAE, CETONIINAE). Although *Cetonia albopicta* Gory & Percheron, 1833 and *Cetonia albopicta* Motschulsky, 1845 are primary homonyms they have never been in use simultaneously; the former had been removed from *Cetonia* before the latter was described. Both names are used for fruit chafers, the former from South Africa, the latter from the Caucasus region; they are classified in different tribes or subtribes and their names are in common use.

Keywords. Nomenclature; taxonomy; *Oxythyrea albopicta*; *Trichostetha albopicta*; fruit chafers.

1. Gory & Percheron (1833, p. 256) described *Cetonia albopicta*, a fruit chafer from Southern Africa. The holotype is deposited in the Muséum national d'Histoire naturelle, Paris (Holm & Marais, 1988, p. 59). The species was transferred to *Trichostetha* Burmeister, 1842 by Burmeister (1842, p. 402) where it has remained. *Trichostetha* is classified as belonging to the tribe DIPLOGNATHINI (see Holm & Marais, 1988).

2. Motschulsky (1845, p. 59) described *Cetonia albopicta*, a fruit chafer from southern Russia and the Caucasus. It was transferred to *Oxythyrea* Mulsant, 1842 by Kraatz (1880) where it has remained since. Kraatz published the paper written by an anonymous French author and is, therefore, responsible for this nomenclatural act. *Oxythyrea* is currently classified as belonging to the tribe CETONIINI, subtribe LEUCOCELINA (see Krikken, 1984, p. 59; Baraud, 1992, p. 818).

3. Reiche (1860, p. ccix) recognized the preoccupation of *Cetonia albopicta* Motschulsky and introduced the replacement name *Cetonia leucosticta*. This replacement name, though justified and formally correct, has not been used subsequently by any author. However, both *Trichostetha albopicta* (see Holm & Marais, 1988, p. 58; 1992, p. 157; Gäde et al., 1992, p. 133; Marais & Holm, 1992, p. 78; Krajčik, 1998, p. 85; Sakai & Nagai, 1998, p. 303) and *Oxythyrea albopicta* (see Kraatz, 1880; Medvedev, 1964, p. 116; 1965, p. 206; Kryzhanovskii, 1965, p. 142; Iablokov-Khnzorian, 1967, p. 205; Dzhabazishvili, 1979, p. 246; 1990, p. 58; Mikšić, 1982, p. 45; Nikolaev, 1987, p. 211; Baraud, 1992, p. 819; Krajčik, 1998, p. 69) have been used continuously.

4. Although *Cetonia albopicta* Gory & Percheron, 1833 and *Cetonia albopicta* Motschulsky, 1845 are primary homonyms, they have never been in use simultaneously, because the former had been removed from *Cetonia* before the latter was described. Considering the classification of *Oxythyrea albopicta* and *Trichostetha albopicta* in two different suprageneric groups (subtribes or tribes, depending on the author) that has been stable for a long time, it is not necessary to introduce the forgotten replacement name *Cetonia leucosticta* Reiche (a nomen oblitum), since *Oxythyrea albopicta* (Motschulsky) and *Trichostetha albopicta* (Gory & Percheron) will never become congeneric. Replacing the well-known name *Oxythyrea albopicta* would cause unnecessary confusion.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the name *Cetonia albopicta* Motschulsky, 1845, as published in the binomen *Cetonia albopicta*, is not invalid by reason of being a junior primary homonym of *albopicta* Gory & Percheron, 1833, as published in the binomen *Cetonia albopicta*;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *albopicta* Gory & Percheron, 1833, as published in the binomen *Cetonia albopicta*;
 - (b) *albopicta* Motschulsky, 1845, as published in the binomen *Cetonia albopicta*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *Cetonia leucosticta* Reiche, 1860 (a nomen oblitum).

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Cetonia albopicta Gory & Percheron, 1833—original figure of holotype, pl. 49, fig. 1.

Case 3289***Emphania* Erichson, 1847 (Insecta, Coleoptera): proposed conservation of usage by designation of *Heptomera metallica* Blanchard, 1850 as the type species**

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Abstract. The purpose of this application, in relation to Article 67.2.2 of the Code, is to conserve the last 150 years' usage of the name *Emphania* Erichson, 1847 for a group of scarab beetles (family SCARABAEIDAE) by designating *Heptomera metallica* Blanchard, 1850 (the senior subjective synonym of *Emphania chloris* Burmeister, 1855) as the type species. The genus *Emphania* was originally established without any included nominal species. The first species were subsequently included in *Emphania* by Blanchard in 1850 and it is proposed (contrary to Article 67.2.2 of the Code) that in the interests of nomenclatural stability none of these is designated as type species. The original specimen on which Erichson based his description of *Emphania* was studied by Burmeister in 1855, and described as the new nominal species *Emphania chloris*.

Keywords. Nomenclature; taxonomy; SCARABAEIDAE; *Emphania*; *Emphania metallica*; *Emphania chloris*; scarab beetles.

1. The genus *Emphania* Erichson, 1847 (p. 695) was established without any included nominal species, but with a short, significant morphological description and distributional data relating to the island of Madagascar.

2. Blanchard (1850, p. 80) was the first author who subsequently used the name *Emphania* with reference to Erichson (1847) as a 'divisio' within the genus *Omaloplia* and he included 17 new species.

3. The original specimen, on which Erichson's description was based, was studied and described as the new nominal species *Emphania chloris* by Burmeister (1855, p. 180). Based on the work by Brenske (1899, p. 238), who synonymized *Emphania chloris* with *Heptomera metallica* Blanchard, 1850 (p. 89) and considered the genus to be monospecific, the name *Emphania* has subsequently been understood in the sense of Burmeister (1855) and Brenske (1899), rather than the concept of Blanchard (1850). However, no type species has been formally designated.

4. Except for Lacordaire's (1856, p. 205) synonymizing of *Emphania* with *Serica* MacLeay, 1819, Moser (1911, p. 513), who described two additional species for the genus, and in the catalogue of Dalla Torre (1912, p. 39), the name *Emphania* has never been treated taxonomically again. Machatschke (1959, p. 744) mentioned *Emphania* in a systematic study of SERICINI, but without any attempt to place the genus taxonomically.

5. No taxon included by Blanchard (1850) in *Emphania* fits the original description of the genus by Erichson (1847, p. 695) or the subsequent understanding of the concept (see para. 3 above). The name *Emphania* Erichson would need to be redefined if any of the nominal species subsequently included by Blanchard were to be selected as the type species of *Emphania*. Type species designation of any of the species named by Blanchard (1850) under *Emphania* would affect the synonymy of five additional generic names: *Comaserica* Brenske, 1897; *Hyposerica* Brenske, 1897; *Maladera* Mulsant & Rey, 1871; *Neuroserica* Brenske, 1900 and *Tamnosserica* Brenske, 1899. Brenske (1897, 1899, 1900) used these genera for the 17 species described under '*Emphania*' by Blanchard (1850). All these nominal genera have been used as valid names since they were erected. However, for three of these genera a type species has not yet been designated.

6. Under Article 67.2.2, one of Blanchard's (1850) included species should be designated as type species. However, in order to conserve the current usage of the name *Emphania*, it is proposed that *Heptomera metallica* Blanchard, 1850 (the senior synonym of *Emphania chloris* Burmeister, 1855) be designated as the type species of *Emphania*. This is not an originally or first subsequently included nominal species and so this proposal requires action by the Commission to set aside the provisions of Article 67.2.2.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside the provisions of Article 67.2.2 of the Code and to designate *Heptomera metallica* Blanchard, 1850 as the type species for the genus *Emphania* Erichson, 1847;
- (2) to place on the Official List of Generic Names in Zoology the name *Emphania* Erichson, 1847 (gender: feminine), type species by designation in (1) above *Heptomera metallica* Blanchard, 1850;
- (3) to place on the Official List of Specific Names in Zoology the name *metallica* Blanchard, 1850 as published in the binomen *Heptomera metallica* (specific name of the type species of *Emphania* Erichson, 1847 and senior subjective synonym of *Emphania chloris* Burmeister, 1855).

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Comments on the draft proposal to amend the Code with respect to trace fossils

(Proposal, see BZN 60: 141–142, 215–216)

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In the recent proposal to clarify the meaning of the term ichnotaxon, Bertling et al. (BZN 60: 141–142) suggested that the Glossary definition of ‘work of an animal’ should be emended. To supplement the proposed definition of trace fossil, the draft included clearly worded lists of structures that qualify as trace fossils and otherwise. In the proposal, fossil cocoons, pupal cases, plant galls and spider webs are considered to be animal products instead of true trace fossils. However, a vigorous general discussion in the ichnologic community in July and August 2003 (Skolithos, 2003) resulted in a consensus that these terms include some structures that qualify as trace fossils, suggesting the need to refine the wording further. Such refinement is proposed herein to reduce ambiguity between trace and body fossils, delineating a sharper boundary around the ichnological realm.

Cocoon is used in the invertebrate literature with different meanings. Many insect cocoons are structures built of silk and different amounts of other materials to oviposit, or protect larvae and pupae (e.g. Chapman, 1982). *Pallichnus* Retallack, 1984, *Fictovichnus* Johnston et al., 1996, *Rebuffoichnus* Roselli, 1939, and *Teisseirei* Roselli, 1985 are available ichnotaxa for pupal chambers (or cocoons or pupal cases) found in paleosols (Genise et al., 2002). Fossil wasp cocoons have also been recorded but not named (e.g. Bown et al., 1997). Eleven ichnogenera are attributed to trichopteran (caddisfly) cases made with silk and various coarse materials in aquatic environments (e.g. Sukatcheva, 1982, 1999). The ichnotaxonomy of caddisfly cases is well developed. The first ichnogenus was erected by Bosc (1805) and, at present, this is one of the few ichnotaxonomic arrangements that utilizes ichnosubgenera (Sukatcheva, 1982). These cocoons involve behaviour (weaving) and modification of substrate (silk and other materials), thus qualifying as true trace fossils.

In contrast, the so-called ‘cocoons’ of clitellates (e.g. Manum et al., 1991) and puparia of dipterans (e.g. Chapman, 1982) are just secretions and tanned larval cuticles, respectively; they involve neither behaviour nor modification of substrate. These more likely qualify as body fossils. Thus, we consider all kinds of constructed cocoons (e.g. woven cocoons, caddisfly cases) as trace fossils, whereas simply secreted cocoon-like structures and larval cuticles, such as clitellate ‘cocoons’ and dipteran puparia, are body fossils.

Similarly, the proposal ruled out spider webs as traces because they were considered, along with eggs and pearls, as secretions (Bertling et al., 2003). However, in spider webs and egg cocoons, the producer weaves the silk in a second step into a construction (i.e. a trace; e.g. Foelix, 1982). Fossil silk threads from spider webs are exceedingly rare in the fossil record (Poinar, 1998); the oldest examples have recently been reported from Early Cretaceous Lebanese amber (Zschokke, 2003). Cocoons are also sometimes preserved in amber (Poinar, 1998). One ichnogenus of caddisfly cases, *Secrindusia*, is basically composed of silk with few if any clastic particles (Sukatcheva, 1999). Indeed, the morphology of fossil trichopteran cases shows a

continuum from structures composed almost entirely of silk to those in which silk is only sparingly used to cement other materials. It is impossible to demark a boundary between traces and non-traces based on the amount of silk incorporated within a structure. Regarding the proposed definition of trace fossil, in constructed webs, nets and cocoons, silk is considered to be the substrate that is modified by the producer.

In addition, the substrate to which these silk structures are attached may also be modified. Trichopteran silk nets and cases may play an important role in the deposition of travertine (Drysdale, 1999; Leggitt & Loewen, 2002). Silky webs, nets and cocoons are true traces, not comparable to eggshells or pearls, which are un-reworked secretions. Nor are they comparable with agglutinated foraminiferan tests, which incorporate sand grains actively on the cell wall. These tests may fully match the producer morphology, and as such they are considered body fossils.

Plant galls may be initiated by viruses, fungi, other plants and invertebrates, especially arthropods. Accordingly, diverse kinds of galls exist that may involve the abnormal production of organs or tissues, which in turn may be patternless or show a repeated size and shape (Scott et al., 1992). Ichnologically, it is important to consider that in insect-made galls, the larva grows by feeding from the plant tissues, pupates and emerges as an adult. In doing so, it produces a boring, pellets, a pupal chamber and an exit hole, all of them true traces that have been recorded in fossil leaves and stems (e.g. Scott et al., 1992; Labandeira & Phillips, 1996). In other cases, galls may preserve only the plant reaction tissue and as such may not qualify as trace fossils. The oviposition, plus the larval boring, pellets, pupation chamber and exit hole together make up a composite trace fossil inside the reaction tissue, similar to other traces in leaves, but with disproportionate development of reaction tissue. Besides, all recognized traces of phytophagy, not just galls, produce reaction tissue (Scott et al., 1992; Labandeira, 1998). It is impossible to rule out traces involved in galls, if only because they are surrounded by particularly developed reaction tissues. Moreover, the gall inducer often directly controls the growth, shape and consistency of the reaction tissue (even by DNA transfer). It is difficult in this case to decide where the behaviour of the gall inducer starts to be replaced by mere 'secretion' by the plant. Hence, the term gall should be discarded because it is ichnologically ambiguous, whereas more properly defined plant reaction tissue may be included as a clear example of a structure that does not qualify as a trace fossil.

In conclusion, the proposal by Bertling et al. (2003) is affirmed though slightly modified. The Code must be clear, and thus has to define ichnotaxon accurately. We propose to define an ichnotaxon as the name of a trace fossil (including burrows, borings and etchings, tracks and trackways, coprolites, gastroliths, regurgitaliths, nests, woven cocoons, spider webs, leaf mines, some type of galls, bite and gnaw structures).

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(2) M. Bertling², A.K. Rindsberg⁶, M. Schlirf⁷, J.K. Nielsen⁴, R. Mikuláš⁵, J. Genise¹, K.S.S. Nielsen⁴, A. Uchman⁸ and R.G. Bromley⁴ (see p. 39 for addresses)

Bertling et al. (BZN **60**: 141–142) have proposed various changes to a new edition of the Code, which were commented on by Tubbs (BZN **60**: 215–216). His comments show that major arguments obviously have not been put in a way fully comprehensible for the non-ichnologist. Among other things, he states it is not the case ‘that the Code draws a distinction between fossilized tracks and other “works” such as galls, coprolites and nests’ (para. 7). This necessitates two replies. In a separate note,

Genise et al. (see (1) above) explain why some kinds of galls and cocoons must not be considered traces or trace fossils, respectively. This should prohibit apodictic declarations such as 'names based on fossilized galls, cocoons, etc. are ichnotaxa' (see BZN 60: 215–216). And in the current comment, we address other arguments raised by Tubbs that need further consideration.

A crucial issue is the relationship of the terms 'work of an animal', 'ichnotaxon' and 'trace fossil'. Tubbs admits that 'confusion perhaps arises from the Glossary' (para. 3) but nonetheless argues in favour of retaining the wording of the Code and creates the impression that the current wording covers all ichnological nomenclatural needs. This is not the case. The Bertling et al. proposal originated from the need felt by ichnologists to revise the obsolete definitions in the Code that have been carried forward from earlier editions. Tubbs argues that the revised definitions differ from those given in the Code, which is true and intended. This statement is his main argument for rejecting the proposal. As biologists and geologists, we fully understand the difficulty that non-specialists have in dealing with names that are based ultimately on living behavior rather than genetic material. However, as specialists who have debated these topics for several years, we consider that we have now defined the objects of our study in the most parsimonious way.

Further on, Tubbs states that 'all these fossils [galls, cocoons, etc.] are commonly called trace fossils' (para. 2). Apart from the fact that very few papers have ever been published on fossil galls and cocoons, introducing 'common' usage of specialist terms into a legislative work that aims at maximum clarity is counterproductive. In addition, some structures that are commonly considered the work of animals (and other organisms) are not considered trace fossils, e.g. soils and biologically induced or destroyed bedding. Against this background, Bertling et al. tried to clarify the terms 'work of an animal', 'ichnotaxon' and 'trace fossil' precisely because their Code definitions are obsolete. The seemingly most commonly understandable term, 'work of an animal', is the most ambiguous, especially as it has hardly been used in the last few decades of ichnological literature. Based on the perception that the Code should not contain ambiguous expressions, Bertling et al. favoured eliminating the obsolete and unscientific, thus unnecessary term, 'work of an animal' from the Code. Tubbs cites the proposal in a misleading way in stating that 'Bertling et al. propose . . . to define 'work of an animal' as trace fossils . . . as well as secretions such as eggs . . .', as it was not the aim of the proposal to define the term 'work of an animal' but to explain its ambiguity. Tubbs's comment also shows why terms of common usage should be avoided. Trace fossils and their names (ichnotaxa), on the other hand, are well defined, even though some specialists in marginal fields (e.g., fossil eggs) have idiosyncratic ideas about ichnology. It would be of little help therefore to add a Glossary entry 'trace fossil', as offered by Tubbs (para. 7) without deleting 'work of an animal' from the text.

A different issue is the question whether the Code covers ichnotaxa of non-animal origin. In the eyes of the ichnological community, it was a welcome sign of progress in the current edition of the Code to see 'animals' in Article 1.2.1 changed to 'organisms'. How else should one deal with ichnotaxa whose producers cannot be assigned to a kingdom? Dozens of ichnotaxa of questionable producer assignment have been erected under the provisions of the Code and are used by active and respected ichnologists (e.g., Radtke, 1991; Vogel et al., 2000). These trace fossils may

have been produced by protists, fungi, chlorophytes or cyanobacteria, i.e. they may be of animal origin or not. Tubbs denies this situation encountered in daily ichnological work in stating 'if the agent is known not be an animal the Code does not apply'. Following this personal interpretation of Article 1.2.1, an ichnotaxon would be subject to the Code as long as its producer would be unknown; it would fall outside the provisions of the Code as soon as the non-animal origin of the trace fossil could be demonstrated. This argument can be considered unrealistic because the producer can never be identified with certainty. There will always be a chance that extinct or unknown organisms have produced structures that look like those nowadays resulting from different life activities.

Even more dramatic is Tubbs's misconception that 'fossilized works of animals' and 'trace fossils' are synonymous (para. 3). This statement, which is demonstrably erroneous, is a circular argument based on the current wording of the Code. There are many more trace fossils than those of animal origin but neither the botanical nor the bacterial Code contains provisions for ichnotaxa. This means that an ichnotaxon going back to an unknown or non-animal producer currently has no 'legal' standing. For these reasons, we adhere to our opinion that any trace fossils irrespective of their origin should be covered by the zoological Code.

Some other points are uncontested. We understand the reasoning provided by Tubbs not to revoke Article 1.3.6 as originally proposed. Also, ichnologists will gladly accept the clarification that ichnofamilies require typification and that ichnofamilies do not compete with biotaxa.

Additional references

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Vogel, K., Gektidis, M., Golubi, S., Kiene, W.E. & Radtke, G. 2000. Experimental studies on microbial bioerosion at Lee Stocking Island, Bahamas and One Tree Island, Great Barrier Reef, Australia: implications for paleoecological reconstructions. *Lethaia*, **33**: 190–204.

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- (7) *Institute for Palaeontology, Pleicherwall I, D-97070 Würzburg, Germany*
- (8) *Institute of Geological Sciences, Jagiellonian University, ul. Oleandry 2a, PL-30 063 Krakow, Poland.*

Comment on the neotypification of protists, especially ciliates (Protozoa, Ciliophora)
 (General Article; see BZN **59**: 165–169; **60**: 48–49, 143, 216–217)

S.A. Revets

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I am against the proposal in this general article that Article 75.3.6 should be waived in relation to ciliates, other protists and small Metazoa. Successive editions of the Code have regarded the designation of neotypes as unusual acts, admissible only in exceptional circumstances. Therefore, rules governing the designation of a neotype are numerous and stringent, designed to ensure that a neotype will come as close as possible to the original concept of a nominal species.

Foissner proposes to relax the rules governing the designation of neotypes for Ciliophora and other groups of protists, and possibly even small Metazoa. As far as I am concerned, this proposal is unacceptable because it goes against both the letter and the spirit of the Code. It threatens the universality of the Code by trying to create a special interest group. Very few, if any, taxonomists have the luxury of working with a group that is free of nomenclatural problems. If we were to accept the logic of Foissner's proposal, there is a danger that each generation would be entitled to throw out the types prepared with 'outdated' techniques and allow 'authoritative' redescrptions to be made and supported by new neotypes. Advances in techniques and methods are valuable aids for taxonomy and accompanying nomenclature, they cannot be allowed to steer or control taxonomy and nomenclature. Relaxing the requirements of the neotypification process for ciliates while maintaining these same requirements for all other organisms would destroy the universality of the Code. Furthermore, it carries the very real possibility of students of other groups also making applications to waiver or to relax other requirements of the Code to facilitate their endeavours. That would destroy the universality and the authority of the Code.

Comment on the proposed precedence of *Ovula gisortia* Passy, 1859 over *Cypraea coombii* J. de C. Sowerby in Dixon, 1850 (Mollusca, Gastropoda)
(Case 3220; see BZN 59: 173–175; 60: 218–220)

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I disagree with the point of view of Todd (BZN 60: 218–220) on the following points:

1. The type material of *Cypraea coombii* only contains the complete specimen figured by Sowerby in Dixon (1850) and several remains. The specimen no. 5 mentioned by Schilder corresponds to *Gisortia tuberculosa* (Duclos, 1825) from the Ypresian of the Paris basin. I also stress that Edwards recorded a specimen which was originally deposited in the Museum of Bowerbank, but which was destroyed. This specimen possessed a large callosity on the dorsal face that differed from that of the type of *G. coombii*. This feature makes *G. coombii* closer to *G. gisortiana* than *G. tuberculosa*, as supposed by the authors who had erroneously regarded *G. coombii* as a variety of *G. tuberculosa*.

2. Todd disagreed with the use of the application of Article 81.2.3 of the Code for reasons which are unclear. When he referred to the geographic and stratigraphic

ranges of *G. coombii* he only confirmed that the stratigraphic ranges of *G. coombii* and *G. gisortiana* are identical (Early Lutetian). In addition the range and rarity of the specimens cannot be used to discuss the validity of the names. *G. coombii* is of course a rare species, but *G. gisortiana* is also rare in France.

3. Todd regarded the work by Schilder (1930) on *Gisortia* as the most complete treatment. Luc Dolin (world specialist of the cypraeids) and I do not consider that this work is the best work for the systematic treatment of *Gisortia*. Considering *Gisortia* and *Megalocypraea* (= *Gisortia*), Schilder discussed 35 taxa of which only five have a preserved shell; thirty taxa are preserved as internal moulds lacking useful morphological characters. This treatment is totally absurd in introducing many species, for which distinctive characters at generic level (e.g. terminal folds, fossula) as well as specific level are missing and only exist when the shells are well preserved. Thus, it appears that in his systematic treatment, Schilder discussed one of the rare specimens of *G. coombii* which has the shell preserved. Moreover, we also point out that the synonymy list presented by Schilder is very short.

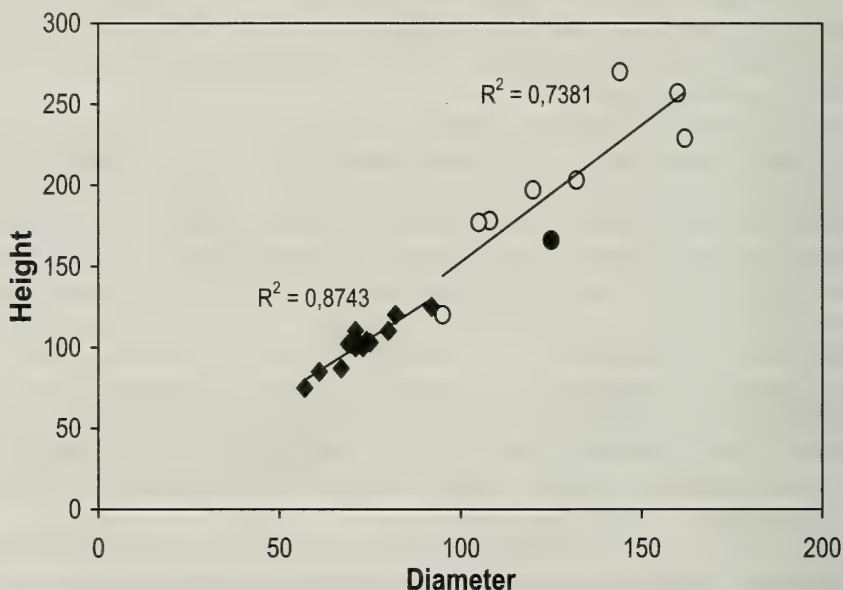
4. Among six reasons given by Schilder for the systematic treatment of the family, Todd remarks that two (Schilder's numbers 4 and 6) are relevant to the current application. Reason no. 4 (many species are known from only one or a few specimens) cannot be used as an argument against the synonymy of *G. coombii* and *G. gisortiana*. Moreover, this argument effectively favours the splitting of species. If Reason no. 6 (most writers have had no opportunity to examine original specimens) is pertinent for previous authors, it is not so in our case. We have examined the type specimens of all species attributed to *Gisortia*: *tuberculosa*, *coombii*, *gisortiana*, *pterophora* and *chevallieri*. The other type specimens are useless internal moulds. In addition, we also have the opportunity to check the type specimens of the subgenus *Vicetia* for further comparison. Consequently, I consider that we are able to give an accurate statement of the synonymy of *G. coombii* and *G. gisortiana*.

5. The short biometric analysis based on preserved shells (see figure below) justifies the taxonomic distinction between *G. gisortiana* and *G. tuberculosa*, and also demonstrates that *G. coombii* is closest to *G. gisortiana*. Also, for qualitative characters, the species strongly varies and *G. coombii* could be easily included in the range of variation of *G. gisortiana*. The callosities mentioned by Todd cannot be regarded as discriminant characters. The French specimens bear either very thick or very thin callosities and some specimens lack callosities. We have not only compared the available specimens using the size, but we have also used the variation of qualitative characters.

6. In our original manuscript we stated that *Gisortia gigantea* should be regarded as a nomen dubium. However, this point was not included in the published application. For further information, I stress here that *Conus gigantea* Keferstein, 1828 and *Conus gigantea* Quenstedt, 1836 are nomina nuda (see Schilder & Schilder, 1971). *Strombus giganteus* Goldfuss, 1841 (based on an internal mould) should be regarded as a nomen dubium as well as *S. giganteus* (see Shalfhaütl, 1863). Unfortunately, Dolin & Dolin (1983) regarded the taxon *G. gisortiana* as a synonym of *G. gigantea*, but we now regard this nomenclatural act as an error. Todd cited this work in taking the example of Vredenburg (1927). Dolin and I recognise that the

taxon *G. gisortiana* was often considered as a synonym of *G. gigantea* or that *G. gigantea* was regarded as a distinct species. In addition, Schilder (1927) erected three species of *Gisortia* including four subspecies of *G. gigantea* based on internal moulds. What is the scientific credibility of these taxa?

7. In conclusion, I hope that our proposition is not as premature and unsubstantiated as suggested by Todd. Regarding the occurrence of the taxa, it is also unrealistic to believe that a study based on numerous specimens can be made, only a few specimens being discovered in 180 years. Thus we do not understand why Todd disagreed with our proposal to apply Article 23.2 in order to conserve the taxon *G. coombii*.



Measurements of *Gisortia tuberculosa* (black diamond); *G. gisortiana* (white circles) and *G. coombii* (black circle).

Comment on the proposed conservation of usage of the specific names *Libellula aenea* Linnaeus, 1758 (currently *Cordulia aenea*) and *L. flavomaculata* Vander Linden, 1825 (currently *Somatochlora flavomaculata*; Insecta, Odonata) by the replacement of the lectotype of *L. aenea* with a newly designated lectotype (Case 3253; see BZN 60: 272–274)

G. Dévai

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I support this application fully. It is a completely convincing and acceptable approach to providing nomenclatural stability.

Comments on the proposed precedence of *Bolboceras* Kirby, 1819 (July) (Insecta, Coleoptera) over *Odonteus* Samouelle, 1819 (June)

(Case 3097; see BZN 59: 246–248, 280–281; 60: 303–311)

(1) Brett C. Ratcliffe

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I support the application to use *Bolboceras* Kirby, 1819 (July) instead of *Odonteus* Samouelle 1819 (June) because of prevailing usage of the name *Bolboceras*. The name *Odonteus* has not been used since it was first proposed except by Krell in 1990, who suggested that *Odonteus* should be used since it had priority. To do so, however, would not only destabilize the nomenclature for the often cited genus name *Bolboceras*, but it would also decrease the flow of information that is normally associated with the name *Bolboceras*. Moreover, *Bolboceras* is also the type genus for the tribe BOLBOCERATINI and subfamily BOLBOCERATINAE. It would be confusing to use *Odonteus* instead when referring to the type genus of the family-group names. The second volume of 'American Beetles', published in 2002, will be the standard for North American Coleoptera classification for the next several decades, and *Bolboceras* is used in this work (with reference to the current application to the Commission).

(2) M.L. Jameson

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H.F. Howden

Canadian Museum of Nature, P.O. Box 3443, Station 'D', Ottawa, Canada K1P 6P4

Comments by Krell et al. (BZN 60: 303–311) on the proposed precedence of *Bolboceras* Kirby over *Odonteus* Samouelle clearly demonstrate that three names are currently being used for one taxon, thus creating confusion within the literature. In our proposal (BZN 59: 246–248), we seek stability and universality in nomenclature. Krell et al. provide a substantial list of literature that references the names *Bolboceras* Kirby, *Odonteus* auctorum, or *Odontaeus* Dejean for the same taxon. In our proposal, we made the case that preservation of the name *Bolboceras* would lend the greatest nomenclatural stability based on prevailing usage. Worldwide, the name *Bolboceras* has been used extensively in the literature for over 180 years (e.g. Klug, 1845, pp. 36–56; Lacordaire, 1856, p. 142; Boucomont, 1912, pp. 7–14; Curtis, 1829, p. 259; Schaeffer, 1906, pp. 249, 253; Paulian, 1959, p. 44; Benasso, 1971, p. 133; Nikolaev, 1987, pp. 27–28; Barbero & Cavallo, 1999, p. 70). The name *Odonteus* was first brought to the attention of taxonomists by Krikken (1978). Krell (1990) subsequently synonymized *Bolboceras* under *Odonteus*. Krell (1990) proposed that the Principle of Priority be implemented, and that the name *Odonteus* should be used instead

of *Bolboceras*. Based on Krikken (1978), a few authors in Europe implemented use of *Odonteus* prior to its formal synonymy (Nikolaev, 1980; Jessop, 1986; Shirt, 1986).

Although Krell et al. provide a long list of literature to support their opinion, the overwhelming majority of this literature cannot be taken into account for two reasons: (1) the definition of prevailing usage according to Article 23.9.6 and (2) the status of actions of the Commission according to Articles 80 and 82.1. As stated in Article 23.9.6, the mere listing of the name in an index, abstracting publication, nomenclator, or list of names must not be taken into account in determining prevailing usage. Thus, most references provided by Krell et al. must be eliminated from their argument (e.g. Gürlich et al., 1995; Alexandrovitch et al., 1996; Hansen, 1996; López-Colón et al., 1996; Rössner, 1996; Telnov et al., 1997). In addition, when a case is under consideration by the Commission, the prevailing usage (*Bolboceras*) is to be maintained until the ruling of the Commission is published (Articles 80 and 82.1). Based on these Articles and the Case acknowledgement date (December 1998, BZN 55: 205), several references provided by Krell et al. must be eliminated from their argument because they postdate the Case (e.g. Náday & Merkl, 1999; Martín-Piera & López-Colón, 2000; Rheinheimer, 2000; Carpaneto et al., 2001; Geiser, 2001; Jaszay, 2001; Krell, 2001; Lo Cascio, 2001; Ballerio, 2002; Frank & Konzelmann, 2002; Schaefer, 2002).

Krell et al. argue that the name *Odontaeus* Dejean is not a separate generic name but is a subsequent incorrect spelling of *Odonteus* Samouelle. The name *Odontaeus* (with or without the correct author attributed) further confounds nomenclatural stability. The name (with or without the correct author attributed) often appears in the literature (e.g. Boucomont, 1902; Wallis, 1928; Paulian & Baraud, 1982; Zunino, 1984; Baraud, 1992; Bunalski, 1999). Krell (1990) stated that *Odonteus* should be given priority over *Bolboceras* because of the orthographical similarity in spelling of *Odonteus* and *Odontaeus*, thus easing the transition to a new generic name. However, these names are not a reflection of a subsequent incorrect spelling for two reasons. First, Samouelle (1819) attributed *Odonteus* to Köppe, whereas Dejean (1821) attributed *Odontaeus* to Megerle. If these names were the same, then the authors would have attributed the name to the same individual. Second, Samouelle included only *Scarabaeus mobilicornis* Fabricius in his description, whereas Dejean included several previously described species as well as *Scarabaeus mobilicornis* Fabricius. The inclusion by Dejean of many previously described species shows that the concepts for *Odonteus* Samouelle and *Odontaeus* Dejean were different.

Usage of *Odonteus* Samouelle (or other authors), 1819 causes further nomenclatural confusion due to its homonym, *Odonteus* Agassiz, 1838. The name *Odonteus* Agassiz was in prevailing usage (e.g. Blot, 1988) until Krell (1991) noted that *Odonteus* Samouelle had nomenclatural priority. Based on the Principles of Priority and Homonymy, Krell (1991) proposed the replacement name *Odonteobolca* Krell, 1991 for *Odonteus* Agassiz. Confusion with these homonyms further adds to nomenclatural instability that would result from precedence of *Odonteus* Samouelle over *Bolboceras* Kirby as proposed by Krell et al.

Krell et al. suggest that the type species designation for *Bolboceras* Kirby is unequivocal. Their proposal to the Commission to designate *Scarabaeus quadridens* Fabricius, 1781 as the type species for the genus would create a junior synonym

(*Indobolbus* Nikolajev, 1979) and would further disturb nomenclatural stability. Contrary to the opinion of Krell et al., Kirby did not declare 'explicitly that he used exclusively *B. quadridens* to describe the genus'. Kirby (1821) stated that 'details of *Bolboceras* were taken from *B. quadridens*' in reference, we think, to the detailed drawings of the mouthparts of *B. quadridens* that accompany the dorsal habitus drawing of *Bolboceras australasiae* Kirby. The image that accompanies Kirby's description shows a dorsal habitus of *B. australasiae* with the mouthparts of both *B. australasiae* and *B. quadridens* surrounding the image. Thus, Kirby's statement does not unequivocally establish the type species for *Bolboceras*, and there is ample ambiguity regarding Kirby's 'intention' (as Krell et al. assert) that *Scarabaeus quadridens* Fabricius, 1781 is the type for the genus. Curtis (1829, p. 259) unequivocally established the type species of *Bolboceras* Kirby as *Scarabaeus mobilicornis* Fabricius (by subsequent designation).

In summary, Krell et al. do not demonstrate stability or universality in the usage of *Odonteus* Samouelle. Their proposal to the Commission to designate *Scarabaeus quadridens* Fabricius, 1781 as the type species for *Bolboceras* Kirby further destabilizes usage because the type species has already been clearly designated (*Scarabaeus mobilicornis* Fabricius, 1775). Their proposal for precedence of *Odonteus* Samouelle over *Bolboceras* Kirby further confounds nomenclatural stability because of confusion with the junior homonym, *Odonteus* Agassiz, 1835, and the name *Odontaeus* Dejean. Nomenclatural stability and universality would be achieved by conserving the usage of *Bolboceras* Kirby, a name that has been prevalent for over 180 years. We stick by the proposals made to the Commission in our application.

Additional references

- Blot, J.** 1988. La représentation schématique des relations existant entre le squelette axial et la squelette interne des nageoires impaires chez un grand nombre de Téléostéens (formule Blot), permet de rectifier une erreur de détermination et de mettre en évidence la croissance allométrique des rayons épineux des nageoires impaires dans l'espèce *Acanthonemus subaureus* (de Blainville) de l'Eocène inférieur de Bolca (Italie du Nord). *Compte Rendu de l'Académie des Sciences*, Paris, sér. II, **307**: 1131–1136.
- Lacordaire, J.T.** 1856. *Histoire Naturelle des Insectes*. Genera des Coléoptères, vol. 3. 594 pp. Librairie Encyclopédique de Roret, Paris.
- Schaeffer, C.** 1906. On *Bradycinetus* and *Bolboceras* of North America, with notes on other Scarabaeidae. *Transactions of the American Entomological Society*, **32**: 249–260.

Comments on the proposed conservation of *Lius* Deyrolle, 1865 (Insecta, Coleoptera)
(Case 3194; see BZN **60**: 132–134)

(1) Svatopluk Bílý

*Department of Entomology, National Museum, Kunratice 1, 14800 Praha 4,
Czech Republic*

I support this application.

(2) Mark G. Volkovitsh

*Zoological Institute of the Russian Academy of Sciences, Universitetskaya nab. 1,
199034 St. Petersburg, Russia*

I support this application.

(3) Mark Yu. Kalashian

Institute of Zoology, National Academy of Armenia, ul. Sevaka 7, Erevan, Armenia

I support this application.

(4) Allen Sundholm

Turrella, Sydney, N.S.W., Australia

I support this application.

Comments on the proposed precedence of the specific names *Acmaeodera oaxacae* Fisher, 1949 and *Polycesta deserticola* Barr, 1974 (Insecta, Coleoptera) over those of *Acmaeodera philippinensis* Obenberger, 1924 and *Polycesta aruensis* Obenberger, 1924 respectively

(Case 3257; see BZN 60: 124–126)

(1) Svatopluk Bílý

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Czech Republic*

I do not support this application. Incorrect locality data that do not reflect real distribution are not acceptable grounds for reversal of precedence in relation to these names.

(2) Mark G. Volkovitsh

*Zoological Institute of the Russian Academy of Sciences, Universitetskaya nab. 1,
199034 St. Petersburg, Russia*

I do not support this application. It does nothing to improve nomenclatural stability.

(3) Mark Yu. Kalashian

Institute of Zoology, National Academy of Armenia, ul. Sevaka 7, Erevan, Armenia

I do not support this application.

(4) Allen Sundholm

Turrella, Sydney, N.S.W., Australia

I support this application.

Comments on the proposed conservation of usage of the names *Phymaturus* Gravenhorst, 1837 and *Lacerta palluma* Molina, 1782 (currently *Phymaturus palluma*; Reptilia, Sauria) by designation of a neotype for *Lacerta palluma* (Case 3225; see BZN 60: 38–41, 58, 313–314)

(1) Darrel Frost

*Division of Vertebrate Zoology, American Museum of Natural History,
Central Park West at 79th Street, New York, NY 10024–5192, U.S.A.*

I support this application. The lizard in question has a substantial literature outside of systematics and so stabilizing the name *Phymaturus palluma* will have a salutary effect on communication among biologists.

(2) Richard Etheridge and Jay M. Savage

*Department of Biology, San Diego State University, San Diego,
California 92182–4614, U.S.A.*

In response to the comments by Veloso et al. in BZN 60: 313–314, we make the following comments. The facts relating to the various names in this case are not at issue. However, *Phymaturus palluma* and *Callopistes maculatus* were consistently and universally applied in the manner supported by our proposal from 1837 until 1985, as acknowledged by Veloso et al. in the first paragraph of their comment to the Commission. As their remaining remarks make clear, the 1985 paper by Cei & Lescure (see also Lescure & Cei, 1991; Veloso et al., 2000) ushered in a two decade period of instability in the previous long accepted usage of the involved names. In contrast, our proposal contributes to stability by preserving over 150 years of prevailing usage by unambiguously establishing the application of the generic and specific names to those taxa with which they have been long associated.

Comments on the proposed conservation of usage of the specific name *Palaeortyx phasianoides* Milne-Edwards, 1869 (Aves, Galliformes) by the designation of a neotype (Case 3266; see BZN 60: 211–214)

(1) Bradley C. Livezey

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I fully support this application.

(2) Zlatozar Boev

*Fossil and Recent Birds Department, National Museum of Natural History,
Bulgarian Academy of Sciences, 1 Blvd. Tsar Osvoboditel, 1000 Sofia, Bulgaria*

I support this application.

(3) Zygmunt Bochenski

*Institute of Systematics and Evolution of Animals, Polish Academy of Sciences,
31-016 Krakow, Slawkowska 17, Poland*

I support this application.

(4) Peter Ballmann

Am Nordpark 1b, 50733 Köln, Germany

I recommend that this petition to the Commission be accepted without amendments.

(5) Gareth Dyke

Department of Zoology, University College Dublin, Belfield, Dublin 4, Ireland

I totally agree that the usage of the name *Palaeortyx phasianoides* should be maintained in the ornithological literature by the designation of a neotype. Confusion surrounding this issue has been needlessly created by Mlíkovský (2000) and is clearly based on misidentifications and taxonomic inaccuracies. This action will go far to avoid further confusion with regard to the nominal species *Palaeortyx phasianoides* (Gruiformes), *Mionetta blanchardi* (Milne-Edwards, 1863) (Anseriformes) and *Ameripodius alexis* Mourer-Chauviré, 2000 (Galliformes).

Comment on the proposed conservation of the specific name of *Vespertilio nanus* Peters, 1852 (currently *Pipistrellus nanus*; Mammalia, Chiroptera)
(Case 3240; see BZN 60: 42–44, 314–315)

Dieter Kock

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I do not support the application to suppress the name *Vespertilio pipistrellus africanus* Rüppell, 1842 for the African banana bat. This taxon as currently understood is apparently not monotypic as documented by published research work. Until a comprehensive revision of the complex has been achieved, untimely nomenclatural actions are liable to create further instabilities.

OPINION 2060 (Case 3217)***Scleritoderma* Schmidt, 1879 and *Setidium* Schmidt, 1879 (Porifera): usage conserved by the designation of *Scleritoderma flabelliforme* Sollas, 1888 as the type species of *Scleritoderma***

Abstract. The Commission has ruled that the accustomed usage of the names for two genera of sponges, *Scleritoderma* and *Setidium*, both of Schmidt (1879) (family SCLERITODERMATIDAE), is maintained by the designation of *Scleritoderma flabelliforme* Sollas, 1888 as the type species of *Scleritoderma*.

Keywords. Nomenclature; taxonomy; Porifera; Demospongiae; lithistids; SCLERITODERMATIDAE; *Scleritoderma*; *Setidium*; *Scleritoderma paccardi*; *Scleritoderma flabelliforme*; *Setidium obtectum*; sponges.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Scleritoderma* Schmidt, 1879 are hereby set aside and *Scleritoderma flabelliforme* Sollas, 1888 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Scleritoderma* Schmidt, 1879 (gender: neuter), type species by designation in (1) above *Scleritoderma flabelliforme* Sollas, 1888;
 - (b) *Setidium* Schmidt, 1879 (gender: neuter), type species by monotypy *Setidium obtectum* Schmidt, 1879.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *flabelliforme* Sollas, 1888, as published in the binomen *Scleritoderma flabelliformis* (specific name of the type species of *Scleritoderma* Schmidt, 1879);
 - (b) *obtectum* Schmidt, 1879, as published in the binomen *Setidium obtectum* (specific name of the type species of *Setidium* Schmidt, 1879).

History of Case 3217

An application to conserve the usage of the names for two genera of sponges, *Scleritoderma* and *Setidium*, both of Schmidt (1879) (family SCLERITODERMATIDAE), by the designation of *Scleritoderma flabelliforme* Sollas, 1888 as the type species of *Scleritoderma*, was received from Andrzej Pisera (*Instytut Paleobiologii, Polska Akademia Nauk, Warsaw, Poland*) and Claude Lévi (*Muséum National d'Histoire Naturelle, Laboratoire de Biologie des Invertébrés Marins et Malacologie, Paris, France*) on 17 September 2001. After correspondence the case was published in BZN 59: 74–76 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 75–76. At the close of the voting period on 1 December 2003 the votes were as follows: 18 Commissioners voted FOR the proposals, 4 Commissioners (Alonso-Zarazaga, Bouchet, Minelli and Štys) voted AGAINST, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Voting against, Alonso-Zarazaga commented that the best approach for a problem like this is the use of the Principle of Priority. The synonymy of both genera and species, and the provision of a new generic name for *S. flabelliforme* would have been preferable. The use of the name *Scleritoderma* in literature seems to be minimal and the publication of a 'Systema Porifera' not sufficient reason to set aside the Principles of the Code and should be maintained in this case. The genus name *Scleritoderma* is neuter, and the specific epithet *flabelliformis* should have been corrected to its neuter form, *flabelliforme*, throughout the text. The family-group name should have been corrected to SCLERITODERMATIDAE. Likewise, Bouchet commented that the applicants claimed that 'considerable confusion' would result from changing the currently accepted definition of *Scleritoderma* from a genus characterised by the presence of acanthorhabds to a genus that lacks them. However, they had not demonstrated that these consequences go beyond the world of lithistid sponge taxonomists. The case does not justify using the plenary power of the Commission. Also voting against Štys commented that priority should be maintained in this case as it could be interpreted that *Scleritoderma* Schmidt, 1879 was described without originally included species.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- flabelliforme*, *Scleritoderma*, Sollas, 1888, *Report on the Scientific Results of the Voyage of H.M.S. Challenger during the years 1873–76*. Zoology, **25**(63): 316.
obtectum, *Setidium*. Schmidt, 1879. *Die Spongien des Meerbusen von Mexico*, Heft 1, p. 30.
Scleritoderma Schmidt, 1879. *Die Spongien des Meerbusen von Mexico*. Heft 1, p. 28.
Setidium Schmidt, 1879, *Die Spongien des Meerbusen von Mexico*, Heft 1, p. 30.

OPINION 2061 (Case 2900)

***Porites* Link, 1807, *Galaxea* Oken, 1815, *Mussa* Oken, 1815 and *Dendrophyllia* Blainville, 1830 (Anthozoa, Scleractinia): generic names conserved**

Abstract. The Commission has ruled that the names of four genera of scleractinian corals: *Porites* Link, 1807, *Galaxea* Oken, 1815, *Mussa* Oken, 1815 and *Dendrophyllia* Blainville, 1830 are conserved. The names *Galaxea* and *Mussa*, in current use for Indo-Pacific and Caribbean genera respectively, were formally unavailable because the work in which the names were published had been rejected for nomenclatural purposes (Opinion 417, September 1956). The name *Porites* Link is in universal use for a widely distributed reef-building coral but was threatened by the senior homonym *Porites* Cuvier, 1798. The names *Galaxea*, *Mussa* and *Dendrophyllia* (a predominantly deep-water non-reef-building genus) were also threatened by the name *Porites* Cuvier, 1798 as a senior subjective synonym.

Keywords. Nomenclature; taxonomy; Anthozoa; Scleractinia; corals; reefs; *Dendrophyllia*; *Galaxea* (Indo-Pacific); *Mussa* (Caribbean); *Porites*.

Ruling

- (1) Under the plenary power it is hereby ruled that:
 - (a) the following names are available despite having been published in a rejected work:
 - (i) *Galaxea* Oken, 1815;
 - (ii) *Mussa* Oken, 1815;
 - (b) the name *Porites* Cuvier, 1798, and all uses of the name *Porites* prior to the publication of *Porites* Link, 1807, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Galaxea* Oken, 1815 (gender: feminine), type species by subsequent designation by Vaughan (1918) *Madrepora fascicularis* Linnaeus, 1758;
 - (b) *Mussa* Oken, 1815 (gender: feminine), type species by subsequent designation by Vaughan (1918) *Madrepora angulosa* Pallas, 1766;
 - (c) *Porites* Link, 1807 (gender: masculine), type species by absolute tautonymy *Madrepora porites* Pallas, 1766;
 - (d) *Dendrophyllia* Blainville, 1830 (gender: feminine), type species by subsequent designation by Milne Edwards & Haime (1850) *Madrepora ramea* Linnaeus, 1758.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *fascicularis* Linnaeus, 1758, as published in the binomen *Madrepora fascicularis* (specific name of the type species of *Galaxea* Oken, 1815);

- (b) *angulosa* Pallas, 1766, as published in the binomen *Madrepora angulosa* (specific name of the type species of *Mussa* Oken, 1815);
 - (c) *porites* Pallas, 1766, as published in the binomen *Madrepora porites* (specific name of the type species of *Porites* Link, 1807) and as defined by the lectotype designated by Vaughan (1901);
 - (d) *ramea* Linnaeus, 1758, as published in the binomen *Madrepora ramea* (specific name of the type species of *Dendrophyllia* Blainville, 1830) and as defined by the lectotype designated by Zibrowius (1980).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
- (a) GALAXEINAE Vaughan & Wells, 1943 (type genus *Galaxea* Oken, 1815);
 - (b) MUSSIDAE Ortmann, 1890 (type genus *Mussa* Oken, 1815);
 - (c) PORITIDAE Gray, 1842 (type genus *Porites* Link, 1807);
 - (d) DENDROPHYLLIIDAE Gray, 1847 (type genus *Dendrophyllia* Blainville, 1830).
- (5) The name *Porites* Cuvier, 1798, as suppressed in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2900

An application to conserve the names of four genera of scleractinian corals: *Porites* Link, 1807, *Galaxea* Oken, 1815, *Mussa* Oken, 1815 and *Dendrophyllia* Blainville, 1830 was received from Donald C. Potts (*Institute of Marine Sciences, University of California, Santa Cruz, California, U.S.A.*) on 23 June 1993. After correspondence the case was published in BZN 52: 142–147 (June 1995). Notice of the case was sent to appropriate journals. A comment in support of the application was published in BZN 52: 328–329. A comment opposing the application was published in BZN 60: 49–51.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 52: 145–146. At the close of the voting period on 1 December 2003 the votes were as follows: 19 Commissioners voted FOR the proposals, 2 Commissioners (Lamas and Song) voted AGAINST, Bouchet voted FOR proposals (1), (2), (3) and (5) and abstained on proposal (4), no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Bouchet commented that there was no need to place the family-group names on the Official List. His experience with molluscs was that the Official List is already full of family-groups names that have been listed, without purpose, with the wrong author and/or date. The application presents no evidence that the nomenclature of the four coral family-groups has been thoroughly researched, and it might do more harm than good to list them in the course of routine book keeping. He disagreed with Mark Grygier's attempt to attribute the names *Mussa* and *Galaxea* to authors later than Oken. Rejection of Oken's *Lehrbuch* was a rather short-sighted decision (but one the zoological community now has to live with). Under Opinion 417, the letter and spirit of the Code was employed when conserving some of Oken's names. This was done for certain mollusc genera (e.g. *Doto*) and has not been a cause of inconsistency.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- angulosa*, *Madrepora*, Pallas, 1766, *Elenchus zoophytorum sistens generum* . . . 28, p. 299.
Dendrophyllia Blainville, 1830, *Dictionnaire des sciences naturelles*, vol. 60, p. 319.
 DENDROPHYLLIIDAE Gray, 1847, *Annals and Magazine of Natural History*, **19**: 128.
fascicularis, *Madrepora*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 796.
Galaxea Oken, 1815, *Lehrbuch der Naturgeschichte*, vol. 3 (Zoologie), part 1 (Fleischlose Thiere), p. 71.
 GALAXEINAE Vaughan & Wells, 1943, *Geological Society of America, Special Papers*, **44**: 184.
Mussa Oken, 1815, *Lehrbuch der Naturgeschichte*, vol. 3 (Zoologie), part 1 (Fleischlose Thiere), p. 71.
 MUSSIDAE Ortmann, 1890, *Zeitschrift für Wissenschaftliche Zoologie*, **50**: 315.
Porites Cuvier, 1798, *Tableau élémentaire de l'histoire naturelle des animaux*, p. 678.
Porites Link, 1807, *Beschreibung der Naturalien-Sammlung der Universität zu Rostock*, part 3, p. 163.
porites, *Madrepora*, Pallas, 1766, *Elenchus zoophytorum sistens generum* . . . 28, p. 324.
 PORITIDAE Gray, 1842, *Synopsis of the contents of the British Museum*, Ed. 44, p. 135.
ramea, *Madrepora*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 797.

The following are the references for the designation of the type species of the genera listed:

- Dendrophyllia* Blainville, 1830 (*Madrepora ramea* Linnaeus, 1758):
 Milne Edwards, H. & Haime, J. 1850. *A monograph of the British fossil corals. First part. Introduction; corals from the Tertiary and Cretaceous Formations*, p. liii.
Galaxea Oken, 1815 (*Madrepora fascicularis* Linnaeus, 1758):
 Vaughan, T.W. 1918. Publications of the Carnegie Institution of Washington, No. 213. *Papers of the Department of Marine Biology*, **9**: 98.
Mussa Oken, 1815 (*Madrepora angulosa* Pallas, 1766):
 Vaughan, T.W. 1918. Publications of the Carnegie Institution of Washington, No. 213. *Papers of the Department of Marine Biology*, **9**: 122.

The following is the reference for the designation of the lectotypes of the following type species:

- porites*, *Madrepora*, Pallas, 1766:
 Vaughan, T.W. 1901. *Bulletin of the United States Fish Commission*, **20**(2) (for 1900): 315.
ramea, *Madrepora*, Linnaeus, 1758:
 Zibrowius, H. 1980. *Mémoires de l'Institut Océanographique* (Monaco), **11**: 169.

OPINION 2062 (Case 3198)***Heteromesus* Richardson, 1908 (Crustacea, Isopoda): *H. granulatus* Richardson, 1908 designated as the type species**

Abstract. The Commission has designated *Heteromesus granulatus* Richardson, 1908 as the type species of the marine isopod genus *Heteromesus* Richardson, 1908 (family ISCHNOMESIDAE), thereby conserving the established usage of this generic name. Menzies (1962) had designated *Ischnosoma thomsoni* Beddard, 1886 as the type species, but this species has the characters of the genus *Haplomesus* Richardson, 1908 and this designation has been set aside.

Keywords. Nomenclature; taxonomy; Crustacea; Isopoda; ISCHNOMESIDAE; *Heteromesus*; *Haplomesus*; *Heteromesus granulatus*; *Haplomesus thomsoni*; marine.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Heteromesus* Richardson, 1908 are hereby set aside and *Heteromesus granulatus* Richardson, 1908 is designated as the type species.
- (2) The name *Heteromesus* Richardson, 1908 (gender: masculine), type species by designation in (1) above *Heteromesus granulatus* Richardson, 1908, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *granulatus* Richardson, 1908, as published in the binomen *Heteromesus granulatus* (specific name of the type species of *Heteromesus* Richardson, 1908), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3198

An application to conserve the usage of the marine isopod genus *Heteromesus* Richardson, 1908 (family ISCHNOMESIDAE) by designating *Heteromesus granulatus* Richardson, 1908 as the type species was received from Kelly L. Merrin (*Museum Victoria and Department of Zoology, University of Melbourne, Melbourne, Victoria, Australia*) and Gary C.B. Poore (*Museum Victoria, Melbourne, Victoria, Australia*) on 6 March 2001. After correspondence the case was published in BZN 59: 82–84 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 83. At the close of the voting period on 1 December 2003 the votes were as follows: 21 Commissioners voted FOR the proposals, 1 Commissioner (Minelli) voted AGAINST, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

granulatus, *Heteromesus*, Richardson, 1908, *Proceedings of the United States National Museum*, 35: 82.
Heteromesus Richardson, 1908, *Proceedings of the United States National Museum*, 35: 81.

OPINION 2063 (Case 3106)***Remipes marmoratus* Jacquinot, 1846 (currently *Hippa marmorata*; Crustacea, Anomura): priority maintained**

Abstract. The Commission has ruled that priority should be maintained for the specific name of the Indo-Pacific sand or mole crab *Remipes marmoratus* Jacquinot, 1846 (family HIPPIDAE). The junior synonym *Remipes pacificus* Dana, 1852 is not given precedence.

Keywords. Nomenclature; taxonomy; Crustacea; Anomura; HIPPIDAE; *Hippa*; *Hippa marmorata*; *Hippa pacifica*; mole crabs; Indo-Pacific.

Ruling

- (1) The proposal to give the specific name *pacificus* Dana, 1852, as published in the binomen *Remipes pacificus*, precedence over *marmoratus* Jacquinot, 1846, as published in the binomen *Remipes marmoratus*, whenever the two are considered to be synonyms was not approved.
- (2) The name *marmoratus* Jacquinot, 1846, as published in the binomen *Remipes marmoratus*, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3106

An application to conserve the usage of the specific name of *Remipes pacifica* Dana, 1852 for an Indo-Pacific sand or mole crab (family HIPPIDAE) by giving it precedence over *R. marmoratus* Jacquinot, 1846 was received from Christopher B. Boyko (*American Museum of Natural History, New York, NY, U.S.A.* and *Department of Biology, University of Rhode Island, Kingston, Rhode Island, U.S.A.*) and Alan W. Harvey (*Georgia Southern University, Statesboro, Georgia, U.S.A.*) on 16 November 1998. After correspondence the case was published in BZN **59**: 12–16 (March 2002). The title, abstract and keywords of the case were published on the Commission's website. A comment from L.B. Holthuis opposing this case was published in BZN **59**: 131.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN **59**: 14. At the close of the voting period on 1 December 2003 the votes were as follows: 11 Commissioners voted FOR the proposals, 11 Commissioners (Alonso-Zarazaga, Bouchet, Calder, Lamas, Macpherson, Mahnert, Martins de Souza, Minelli, Song, Štys and van Tol) voted AGAINST, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Since there was no majority in favour of the proposals the application was not approved.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

marmoratus, *Remipes*, Jacquinot, 1846, in Hombron, J.B. & Jacquinot, C.H. (Eds.), *Voyage au pôle sud et dans l'Océanie sur les corvettes l'Astrolabe et la Zélée: exécuté . . . pendant . . . 1837–1840, sous le commandement de M.J. Dumont d'Urville, capitaine de vaisseau . . . sous la direction supérieure de M. Jacquinot, . . . Zoologie. Crustacés, part 19, pl. 8, figs. 22–26.*

OPINION 2064 (Case 3181)***Cryptotermes dudleyi* Banks, 1918 (Insecta, Isoptera): specific name given precedence over *Calotermes (Cryptotermes) jacobsoni* Holmgren, 1913**

Abstract. The Commission has ruled that the specific name of *Cryptotermes dudleyi* Banks, 1918 is to be given precedence over that of *Calotermes (Cryptotermes) jacobsoni* Holmgren, 1913 whenever the two are considered to be synonyms. The junior name has been universally used in the biological, systematic and pest control literature since at least 1949 for an important economic termite pest species that is widely distributed by humans, while the senior specific name, *Calotermes jacobsoni*, has not been used since 1934.

Keywords. Nomenclature; taxonomy; Isoptera; *Cryptotermes*; *Cryptotermes dudleyi*; *Cryptotermes jacobsoni*; termites.

Ruling

- (1) Under the plenary power the name *dudleyi* Banks, 1918, as published in the binomen *Cryptotermes dudleyi*, is hereby given precedence over the name *jacobsoni* Holmgren, 1913, as published in the binomen *Calotermes (Cryptotermes) jacobsoni*, whenever the two are considered to be synonyms.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *dudleyi* Banks, 1918, as published in the binomen *Cryptotermes dudleyi*, with the endorsement that it is to be given precedence over the name *jacobsoni* Holmgren, 1913, as published in the binomen *Calotermes (Cryptotermes) jacobsoni*, whenever the two are considered to be synonyms;
 - (b) *jacobsoni* Holmgren, 1913, as published in the binomen *Calotermes (Cryptotermes) jacobsoni*, with the endorsement that it is not to be given priority over the name *dudleyi* Banks, 1918, as published in the binomen *Cryptotermes dudleyi*, whenever the two are considered to be synonyms.

History of Case 3181

An application to conserve the usage of the specific name of *Cryptotermes dudleyi* Banks, 1918 by giving it precedence over the senior specific name *Calotermes (Cryptotermes) jacobsoni* Holmgren, 1913 was received from Michael S. Engel (Natural History Museum and Biodiversity Research Center and Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, Kansas, U.S.A.) and Kumar Krishna (American Museum of Natural History, New York, N. Y., U.S.A.) on 14 November 2000. After correspondence the case was published in BZN 59: 90–92 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 91. At the close of the voting period on 1 December 2003 the votes were as follows: 21 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, 1 Commissioner (Bouchet) abstained, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

In abstaining, Bouchet commented that he would have given his full support to conserve a name widely used in the biological and pest control literature. However, the application gives almost no evidence of that. Nearly all the references cited are taxonomic works and revisions and regional catalogues, and so do not provide a convincing demonstration that the name *Cryptotermes dudleyi* Banks, 1918 has been used extensively in the pest control literature.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

- dudleyi*, *Cryptotermes*, Banks, 1918, *Bulletin of the American Museum of Natural History*, 38(17): 660.
jacobsoni, *Calotermes* (*Cryptotermes*), Holmgren, 1913, *Kungliga Svenska Vetenskaps-Akademiens Handlingar*, (2)50(2): 48.

OPINION 2065 (Case 3147)***Hydroporus neuter* Fairmaire & Laboulbène, 1854 (Insecta, Coleoptera): priority maintained**

Abstract. The Commission has ruled that priority should be maintained for the specific name of a Palaearctic diving beetle, *Hydroporus neuter* Fairmaire & Laboulbène, 1854. The name *Hydroporus discretus* Fairmaire & Brisout in Fairmaire, 1859 is not conserved.

Keywords. Nomenclature; taxonomy; Coleoptera; DYTISCIDAE; *Hydroporus*; *Hydroporus discretus*; *Hydroporus neuter*; diving beetle; Europe; Palaearctic.

Ruling

- (1) Under the plenary power it is hereby ruled that priority is to be maintained for the name *neuter* Fairmaire & Laboulbène, 1854, as published in the binomen *Hydroporus neuter*.
- (2) The name *neuter* Fairmaire & Laboulbène, 1854, as published in the binomen *Hydroporus neuter*, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3147

An application to conserve the specific name of *Hydroporus discretus* Fairmaire & Brisout in Fairmaire, 1859, for a Palaearctic diving beetle, threatened by *H. neuter* Fairmaire & Laboulbène, 1854, was received from Hans Fery (*Räuschstrasse 73, Berlin, Germany*) on 18 October 1999. After correspondence the case was published in BZN 58: 105–107 (June 2001). The title, abstract and keywords of the case were published on the Commission's website. A comment opposing the application was published in BZN 58: 305. A comment in support of the application was published in BZN 59: 38.

The application was sent to the Commission for voting on 1 December 2002. The case received a majority of the votes cast but failed to reach the required two-thirds majority (14 votes FOR and 10 AGAINST). The application was submitted for a second vote under Bylaw 35.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote again on the proposals published in BZN 58: 106. At the close of the voting period on 1 December 2003 the votes were as follows: 12 Commissioners voted FOR the proposals, 9 Commissioners (Alonso-Zarazaga, Bouchet, Brothers, Calder, Kerzhner, Lamas, Martins de Souza, Minelli and Štys) voted AGAINST, Ng abstained, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

The case received a majority of the votes cast on the second vote but since the two-thirds majority required under Bylaw 35 was not achieved the proposals were not approved.

Voting against, Calder commented that evidence presented concerning prevailing usage of the junior synonym *Hydroporus discretus* Fairmaire & Brisout in Fairmaire, 1859 was insufficient to warrant suppression of its senior synonym *H. neuter* Fairmaire & Laboulbène, 1854.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

neuter, *Hydroporus*, Fairmaire & Laboulbène, 1854, *Faune entomologique française ou description des insectes qui se trouvent en France. Coléoptères*, vol. 1, p. 205.

OPINION 2066 (Case 3202)***Podalgus* Burmeister, 1847 and *Philoscaptus* Brèthes, 1919 (Insecta, Coleoptera): current usage of the names conserved by designation of *Podalgus cuniculus* Burmeister, 1847 as the type species of *Podalgus***

Abstract. The Commission has ruled that current usage of the names *Podalgus* Burmeister, 1847 (for an abundant small rhinoceros beetle from the northern Afrotropics, Arabia and west Asia to northern India) and *Philoscaptus* Brèthes, 1919 (for a South American species) is conserved by confirming Arrow's (1908) designation of *Podalgus cuniculus* Burmeister, 1847 as type species of *Podalgus*.

Keywords. Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; DYNASTINAE; *Podalgus*; *Philoscaptus*; *Podalgus cuniculus*; *Philoscaptus bonariensis*; rhinoceros beetles.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Podalgus* Burmeister, 1847 prior to that by Arrow (1908) are hereby set aside and *Podalgus cuniculus* Burmeister, 1847 is confirmed as the type species of *Podalgus* Burmeister, 1847.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Podalgus* Burmeister, 1847 (gender: masculine), type species by subsequent designation by Arrow (1908) *Podalgus cuniculus* Burmeister, 1847, as ruled in (1) above;
 - (b) *Philoscaptus* Brèthes, 1919 (gender: masculine), type species by monotypy *Podalgus bonariensis* Burmeister, 1847.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *cuniculus* Burmeister, 1847, as published in the binomen *Podalgus cuniculus* (specific name of the type species of *Podalgus* Burmeister, 1847);
 - (b) *bonariensis* Burmeister, 1847, as published in the binomen *Podalgus bonariensis* (specific name of the type species of *Philoscaptus* Brèthes, 1919).

History of Case 3202

An application to conserve the current usage of *Podalgus* Burmeister, 1847 and *Philoscaptus* Brèthes, 1919 by the designation of *Podalgus cuniculus* Burmeister, 1847 as the type species of *Podalgus* was received from Frank-Thorsten Krell (*The Natural History Museum, London, U.K.*) on 15 March 2001. After correspondence the case was published in BZN 59: 93–96 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 94–95. At the close of the voting period on 1 December 2003 the votes were as follows: 22 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- bonariensis*, *Podalgus*, Burmeister, 1847, *Handbuch der Entomologie*, Band 5 (Besondere Entomologie. Fortsetzung. Coleoptera Lamellicornia Xylophila et Pectinicornia), p. 118.
cuniculus, *Podalgus*, Burmeister, 1847, *Handbuch der Entomologie*, Band 5 (Besondere Entomologie. Fortsetzung. Coleoptera Lamellicornia Xylophila et Pectinicornia), p. 119.
Philoscaptus Brèthes, 1919, *Physis*, 4: 602.
Podalgus Burmeister, 1847, *Handbuch der Entomologie*, Band 5 (Besondere Entomologie. Fortsetzung. Coleoptera Lamellicornia Xylophila et Pectinicornia), p. 117.

The following is the reference for the designation of *Podalgus cuniculus* Burmeister, 1847 as the type species of the nominal genus *Podalgus* Burmeister, 1847:

- Arrow, G.J. 1908. *Transactions of the Entomological Society of London*, 1908: 341.

OPINION 2067 (Case 3188)

***Nemotois violellus* Herrich-Schaeffer in Stainton, 1851 (currently *Nemophora violella*; Insecta, Lepidoptera): specific name conserved by the designation of a neotype for *Tinea cupriacella* Hübner, 1819 (currently *Nemophora cupriacella*)**

Abstract. The Commission has ruled that the names *Nemotois violellus* Herrich-Schaeffer in Stainton, 1851 and *Tinea cupriacella* Hübner, 1819 are conserved by designating a neotype for *T. cupriacella*.

Keywords. Nomenclature; taxonomy; Lepidoptera; ADELIDAE; *Nemophora*; *Nemophora violella*; *Nemophora cupriacella*; fairy moths; Europe.

Ruling

- (1) Under the plenary power all previous type fixations for the nominal species *Tinea cupriacella* Hübner, 1819 are hereby set aside and the female specimen: ♀, POLAND: Glogów; 'Scab. succisa, Torfwiesen, Glogau, Zeller 1/ [18]53'; Stainton Coll., Brit. Mus.1893–134, in The Natural History Museum, London, is designated as the neotype.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *cupriacella* Hübner, 1819, as published in the binomen *Tinea cupriacella* and as defined by the neotype designated in (1) above;
 - (b) *violellus* Herrich-Schaeffer in Stainton, 1851, as published in the binomen *Nemotois violellus*.

History of Case 3188

An application to conserve the specific name of *Nemotois violellus* Herrich-Schaeffer in Stainton, 1851 for a common and widely distributed European bisexual fairy moth (family ADELIDAE) associated with several *Gentiana* species was received from Mikhail V. Kozlov (*University of Turku, Turku, Finland*) on 24 January 2001. The name was threatened by the senior synonym *Tinea cupriacella* Hübner, 1819 that (although originally based on a male specimen of what has long been called *Nemophora violella*) for almost 150 years has been used for another (apparently parthenogenetic) species and its suppression was proposed. After correspondence the case was published in BZN 59: 30–33 (March 2002). The title, abstract and keywords of the case were published on the Commission's website. Comments opposed to the proposal to suppress *T. cupriacella* were published in BZN 60: 54–58. An alternative proposal to designate a neotype for *T. cupriacella* by Erik J. van Nieuwerkerken (*National Museum of Natural History, Naturalis, Leiden, The Netherlands*) was published in BZN 60: 56.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 32 and BZN 60: 56. At the close of the voting period

on 1 December 2003 the votes were as follows: 4 Commissioners voted FOR the original proposals and 18 Commissioners (Alonso-Zarazaga, Bouchet, Brothers, Calder, Evenhuis, Fortey, Kerzhner, Lamas, Mahnert, Martins de Souza, Minelli, Ng, Nielsen, Papp, Rosenberg, Song, Štys and van Tol) voted AGAINST. Of those who voted against, 16 voted FOR the alternative proposals, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- cupriacella*, *Tinea*, Hübner, 1819, *Sammlung Europäischer Schmetterlinge* Lepidoptera VIII. Tineae, pl. 67, fig. 445.
violellus, *Nemotois*, Herrich-Schaeffer in Stainton, 1851, *Systematische Bearbeitung der Schmetterlinge von Europa*, Band 5 (Die Schaben und Federmotten). Tineides, p. 19.

OPINION 2068 (Case 3210)***Catocala alabamae* Grote, 1875 (Insecta, Lepidoptera): specific name conserved**

Abstract. The Commission has ruled that the specific name of *Catocala alabamae* Grote, 1875 for a species of a small, yellow-hindwinged moth from North America (family NOCTUIDAE) is conserved by the suppression of the senior synonym *C. polygama* Guenée, 1852.

Keywords. Nomenclature; taxonomy; Lepidoptera; NOCTUIDAE; *Catocala*; *Catocala alabamae*; *Catocala polygama*; moths; North America.

Ruling

- (1) Under the plenary power the name *polygama* Guenée, 1852, as published in the binomen *Catocala polygama*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *alabamae* Grote, 1875, as originally published in the binomen *Catocala alabamae*, is hereby placed on the Official List of Specific Names in Zoology.
- (3) The name *polygama* Guenée, 1852, as published in the binomen *Catocala polygama* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3210

An application to conserve the specific name of *Catocala alabamae* Grote, 1875, for a species of a small, yellow-hindwinged moth from North America (family NOCTUIDAE), by the suppression of *C. polygama* Guenée, 1852, was received from Lawrence F. Gall (*Peabody Museum of Natural History, Yale University, New Haven, Connecticut, U.S.A.*) on 18 June 2001. After correspondence the case was published in BZN 59: 117–120 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 119. At the close of the voting period on 1 December 2003 the votes were as follows: 18 Commissioners voted FOR the proposals, 4 Commissioners (Bouchet, Kerzhner, Minelli and Ng) voted AGAINST, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Voting for the proposals, Calder commented that assigning precedence to the name *C. alabamae* over *C. polygama* when the two are considered synonyms rather than suppressing the latter name would have been preferable.

Voting against, Bouchet commented that the limited number of references cited in the application does not demonstrate sufficient usage of the name *C. alabamae* to justify setting aside the Principle of Priority by use of the plenary power. Also voting

against, Ng commented the problem could have been resolved by the careful selection of a neotype for *Catocala polygama* that would keep the name as a junior synonym. Similarly, if there was a problem with the identity of *C. alabamae* because the extant type is a female, a proposal could have been made to the Commission to replace the female with a male specimen that would conserve the name as it is used.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

- alabamae*, *Catocala*, Grote, 1875, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **27**: 427.
polygama, *Catocala*, Guenée, 1852, *Histoire naturelle des insectes. Species général des lepidoptères*, vol. 7 (Noctuelites, vol. 3), p. 105.

OPINION 2069 (Case 3215)

E.L. Holmberg (1917, 1918) 'Las especies argentinas de *Coelioxys*' (Insecta, Hymenoptera): 139 genus-group names applied to groups of species suppressed

Abstract. The Commission has ruled that 139 names which were published by E.L. Holmberg in 1917–1918 for divisions and subdivisions of the megachilid bee genus *Coelioxys* Latreille, 1809 (family MEGACHILIDAE) are suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy. Although they have never been used as names for taxa, these names are available as genus-group names.

Keywords. Nomenclature; taxonomy; Hymenoptera; Apoidea; MEGACHILIDAE; *Coelioxys*; bees; Argentina.

Ruling

- (1) Under the plenary power it is hereby ruled that 139 names which were published by E.L. Holmberg in 1917–1918 for divisions and subdivisions of the megachilid bee genus *Coelioxys* Latreille, 1809 (family MEGACHILIDAE) are suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.
- (2) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

The page number for each name refers to its publication in Holmberg (1917) or (1918) referring to the two works by Holmberg listed in the Original References.

Acraspedon Holmberg, 1917, p. 561
Acrodonomeros Holmberg, 1917, p. 548
Acrolepis Holmberg, 1917, p. 573
Alethodiastictos Holmberg, 1917, p. 576
Allodiastictopelte Holmberg, 1917, p. 549
Alloliopelte Holmberg, 1917, p. 549
Allotropoglyptos Holmberg, 1917, p. 554
Amaurocraspedon Holmberg, 1917, p. 581
Amauropoda Holmberg, 1917, p. 564
Amblyptyche Holmberg, 1917, p. 558
Anacanthomeros Holmberg, 1917, p. 548
Analogodonta Holmberg, 1917, p. 574
Anamictochromata Holmberg, 1917, p. 565
Anepiodonta Holmberg, 1917, p. 558
Ankyloptyche Holmberg, 1917, p. 559
Apediopelte Holmberg, 1917, p. 561
Aphanes, Holmberg, 1918, p. 146
Aponaulax Holmberg, 1917, p. 571
Apophaneros, Holmberg, 1918, p. 145
Atelemelanos Holmberg, 1917, p. 563
Atelerythros Holmberg, 1917, p. 567
Ateletritos Holmberg, 1917, p. 578

Augopette, Holmberg, 1918, p. 153
Aulacotetartos Holmberg, 1917, p. 571
Autodon Holmberg, 1917, p. 559
Autogoniodes Holmberg, 1917, p. 590
Bathycoelios Holmberg, 1917, p. 554
Brachyepiodonta Holmberg, 1917, p. 582
Brachymesodon Holmberg, 1917, p. 560
Brachyparataxis Holmberg, 1917, p. 569
Canonicacros Holmberg, 1917, p. 579
Canonicopempton, Holmberg, 1918, p. 2
Catabrachys Holmberg, 1917, p. 567
Catadolichos Holmberg, 1917, p. 567
Cerasionotos Holmberg, 1917, p. 586
Choristochromata Holmberg, 1917, p. 564
Colobopempton Holmberg, 1917, p. 587
Cryptocraspedon Holmberg, 1917, p. 569
Cryptoptycha Holmberg, 1917, p. 558
Deuteros Holmberg, 1917, p. 581
Deuterythros Holmberg, 1917, p. 567
Diaphoroglyptos Holmberg, 1917, p. 581
Diastictopelte Holmberg, 1917, p. 553
Diatelerythros Holmberg, 1917, p. 583

- Dichromatopoda* Holmberg, 1917, p. 564
Didiastictopelte Holmberg, 1917, p. 558
Diestecodonta Holmberg, 1917, p. 573
Digymnoptyche Holmberg, 1917, p. 547
Dileueocraspedon Holmberg, 1917, p. 582
Diliopelte Holmberg, 1917, p. 558
Dipephricoptycha Holmberg, 1917, p. 548
Diplotritaenia Holmberg, 1917, p. 584
Dolichomesodon Holmberg, 1917, p. 560
Eleutherothrios Holmberg, 1917, p. 548
Engycampyle Holmberg, 1917, p. 578
Epicolobos Holmberg, 1917, p. 547
Epidiodonta Holmberg, 1917, p. 557
Erythrobasis, Holmberg, 1917, p. 546
Erythronotos Holmberg, 1917, p. 557
Erythropleurae Holmberg, 1917, p. 553
Exechoparatasia Holmberg, 1917, p. 570
Gymnoptyche Holmberg, 1917, p. 553
Haematonotos Holmberg, 1917, p. 546
Hegumenerythros Holmberg, 1917, p. 575
Hemistilpnos Holmberg, 1917, p. 566
Heptodonta Holmberg, 1917, p. 585
Hexodonta Holmberg, 1917, p. 586
Holochromatogaster Holmberg, 1917, p. 562
Holomeros Holmberg, 1917, p. 573
Horatocraspedon Holmberg, 1917, p. 553
Hypanodonta Holmberg, 1917, p. 567
Hypobrachys Holmberg, 1917, p. 585
Hypodolichos Holmberg, 1917, p. 585
Hypodontophora Holmberg, 1917, p. 560
Hypomonodon Holmberg, 1917, p. 559
Hypotriodonta Holmberg, 1917, p. 559
Ioetidopoda Holmberg, 1917, p. 562
Ioetidospilos Holmberg, 1917, p. 565
Labidiopempton Holmberg, 1917, p. 546
Lagochilos, Holmberg, 1918, p. 2
Leucocraspedon Holmberg, 1917, p. 561
Liopelte Holmberg, 1917, p. 557
Lioteropelte Holmberg, 1917, p. 549
Melanerythronotos Holmberg, 1917, p. 553
Melanobasis Holmberg, 1917, p. 549
Melanomesonotos Holmberg, 1917, p. 587
Melanonotos Holmberg, 1917, p. 546
Melanopleurae Holmberg, 1917, p. 554
Melanospilos Holmberg, 1917, p. 565
Menoeiderythros Holmberg, 1917, p. 566
Mesodonta Holmberg, 1917, p. 579
Metadiaeopes Holmberg, 1917, p. 573
Metentomes Holmberg, 1917, p. 573
Monochromatopoda Holmberg, 1917, p. 562
Opisthocronis Holmberg, 1917, p. 548
Orthocolobos Holmberg, 1917, p. 558
Orthoptycha Holmberg, 1917, p. 559
Oxyepiptycha Holmberg, 1917, p. 547
Oxyeschatia Holmberg, 1917, p. 560
Palinanalogodonta Holmberg, 1917, p. 582
Palindeuteros Holmberg, 1917, p. 583
Palinanalogodonta Holmberg, 1917, p. 582
Palindiestecodonta Holmberg, 1917, p. 582
Pantelochroma Holmberg, 1917, p. 578
Pantelomelas Holmberg, 1917, p. 567
Pantelostilpnos Holmberg, 1917, p. 566
Panterythromera Holmberg, 1917, p. 579
Paradoxotetartos Holmberg, 1917, p. 548
Pediopelte Holmberg, 1917, p. 561
Penerythros Holmberg, 1917, p. 562
Pephricoptycha Holmberg, 1917, p. 553
Phaenodonta Holmberg, 1917, p. 582
Phancrocraspedon Holmberg, 1917, p. 568
Phaneroptycha Holmberg, 1917, p. 559
Phlyctenopelte Holmberg, 1917, p. 576
Platycatapiesis Holmberg, 1917, p. 578
Platyeschatia Holmberg, 1917, p. 560
Pleonclasoncolobos Holmberg, 1917, p. 579
Pleurodonta Holmberg, 1917, p. 581
Plusierythra Holmberg, 1917, p. 566
Porrhocampyle Holmberg, 1917, p. 576
Porrhodontion Holmberg, 1917, p. 559
Proteros Holmberg, 1917, p. 579
Proterythromera Holmberg, 1917, p. 579
Proterythros Holmberg, 1917, p. 567
Protomonon Holmberg, 1917, p. 583
Pycnocrossos Holmberg, 1917, p. 553
Pycnodiaestictopelte Holmberg, 1917, p. 549
Pycnotrematos Holmberg, 1918, p. 153
Tapinotetartos Holmberg, 1917, p. 572
Tetarterythros Holmberg, 1917, p. 583
Tridiaestictopelte Holmberg, 1917, p. 562
Triliopelte Holmberg, 1917, p. 561
Trimononerythros Holmberg, 1917, p. 583
Trioeidomera Holmberg, 1917, p. 578
Tritania Holmberg, 1917, p. 567
Ukanomalos Holmberg, 1917, p. 547
Utritos Holmberg, 1917, p. 579

History of Case 3215

An application to suppress 139 genus-group names published by E.L. Holmberg in 1917–1918 for divisions and subdivisions of the genus *Coelioxys* Latreille, 1809 (family MEGACHILIDAE) was received from Charles D. Michener (*Natural History Museum and Biodiversity Research Center, Snow Hall, University of Kansas, Lawrence, KS, U.S.A.*) on 7 August 2001. After correspondence the case was

published in BZN **59**: 121–124 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN **59**: 122. At the close of the voting period on 1 December 2003 the votes were as follows: 21 Commissioners voted **FOR** the proposals, 1 Commissioner (Alonso-Zarazaga) voted **AGAINST**, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Voting against, Alonso-Zarazaga commented that each name proposed by Holmberg should be treated independently on its own merits, avoiding a general suppression. Overlooking works written in any other language but English is not a reason for suppression. Holmberg's works should be considered for their value and contribution to systematics and nomenclature outside the general trends. Michener adopted Schrottky's (1920) approach as a comfortable way of removing inconvenient names.

Original References

The following are the original references to the names placed on an Official Index by the ruling given in the present Opinion:

- Holmberg, E.L.** 1917. *Anales del Museo Nacional de Historia Natural de Buenos Aires*, **28**: 541–591.
Holmberg, E.L. 1918. *Physis* (Buenos Aires), **4**: 1–13, 145–166.

OPINION 2070 (Case 3184)***Tetrapedia* Klug, 1810, *T. diversipes* Klug, 1810 and *Exomalopsis* Spinola, 1853 (Insecta, Hymenoptera): usage of the names conserved by designation of a neotype for *T. diversipes***

Abstract. The Commission has designated a male specimen from Brazil as neotype for the anthophorine bee *Tetrapedia diversipes* Klug, 1810. The neotype is deposited in the Museum für Naturkunde der Humboldt-Universität, Berlin. The universal understanding of this nominal species and of the genera *Tetrapedia* Klug, 1810 and *Exomalopsis* Spinola, 1853, and tribes based on these generic names, are thereby conserved in accordance with Article 75.6 of the Code.

Keywords. Nomenclature; taxonomy; Hymenoptera; APIDAE; TETRAPEDIINI; EXOMALOPSINI; *Tetrapedia*; *Tetrapedia diversipes*; *Exomalopsis*; bees; Brazil.

Ruling

- (1) Under the plenary power all previous fixations of name-bearing type for the nominal species *Tetrapedia diversipes* Klug, 1810 are hereby set aside and the specimen from Nova Teutonia, Santa Catarina, Brazil, collected in October 1951 by L.E. Plaumann and deposited in the Museum für Naturkunde der Humboldt-Universität, Berlin, is designated as the neotype.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Tetrapedia* Klug, 1810 (gender: feminine), type species by monotypy *Tetrapedia diversipes* Klug, 1810;
 - (b) *Exomalopsis* Spinola, 1853 (gender: feminine), type species by subsequent designation by Taschenberg (1883) *Exomalopsis fulvopilosa* Spinola, 1853 (a junior synonym of *E. auropilosa* Spinola, 1853).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *diversipes* Klug, 1810, as published in the binomen *Tetrapedia diversipes* and as defined by the neotype designated in (1) above;
 - (b) *auropilosa* Spinola, 1853, as published in the binomen *Exomalopsis auropilosa* (senior synonym of *Exomalopsis fulvopilosa* Spinola, 1853, specific name of the type species of *Exomalopsis* Spinola, 1853).

History of Case 3184

An application to conserve the usage of the names of the species *Tetrapedia diversipes* Klug, 1810 and the genera *Tetrapedia* Klug, 1810 and *Exomalopsis* Spinola, 1853, by the designation of a neotype for *T. diversipes*, was received from Charles D. Michener (*Natural History Museum and Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, Kansas, U.S.A.*) and Jesus S. Moure (*Universidade Federal do Paraná, Curitiba, Paraná, Brazil*) on 22 December 2000. After correspondence the case was published in BZN 59: 34–37 (March 2002). The

title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

In the application proposal (2)(b) it was incorrectly stated that *Exomalopsis auropilosa* Spinola, 1853 was the type species of *Exomalopsis* by subsequent designation by Smith (1854). Correctly, *Exomalopsis fulvopilosa* Spinola, 1853 is the type species of *Exomalopsis* Spinola, 1853 by subsequent designation by Taschenberg (1883), and *Exomalopsis auropilosa* Spinola, 1853 is its senior synonym.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 36. At the close of the voting period on 1 December 2003 the votes were as follows: 21 Commissioners voted FOR the proposals, 1 Commissioner (Alonso-Zarazaga) voted AGAINST, no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Voting against, Alonso-Zarazaga commented that use of the names in the literature seems to be very low. The group of species involved is of no particular interest outside pure systematics and the Principle of Priority should be maintained in this case.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

auropilosa, *Exomalopsis*, Spinola, 1853, *Memoire della Reale Accademia delle Scienze di Torino*, (2)13: 89.

diversipes, *Tetrapedia*, Klug, 1810, *Gesellschaft Naturforschender Freunde zu Berlin, Magazin für neuesten Entdeckungen in der gesammten Naturkunde*, 4: 35–36.

Exomalopsis Spinola, 1853, *Memoire della Reale Accademia delle Scienze di Torino*, (2)13: 89.

Tetrapedia Klug, 1810, *Gesellschaft Naturforschender Freunde zu Berlin, Magazin für neuesten Entdeckungen in der gesammten Naturkunde*, 4: 33–35.

The following is the reference for the designation of *Exomalopsis fulvopilosa* Spinola, 1853 as the type species of *Exomalopsis* Spinola, 1853:

Taschenberg, E.L. 1883. *Berliner Entomologische Zeitschrift*, 27: 82.

OPINION 2071 (Case 3227)

***Geophilus brevilabiatus* Newport, 1845 (currently *Orphnaeus brevilabiatus*) and *Chomatobius brasilianus* Humbert & Saussure, 1870 (currently *O. brasilianus*) (Chilopoda): specific names conserved**

Abstract. The Commission has ruled that the specific names of *Geophilus brevilabiatus* Newport, 1845 and *Chomatobius brasilianus* Humbert & Saussure, 1870 for two widely distributed species of geophilomorph centipedes (family ORYIDAE) are conserved by suppressing the name *Scolopendra phosphorea* Linnaeus, 1758 (a senior synonym of *G. brevilabiatus*) and two senior synonyms of *G. brasilianus*: *G. lineatus* and *G. whitei*, both of Newport (1845).

Keywords. Nomenclature; taxonomy; Chilopoda; Geophilomorpha; ORYIDAE: *Scolopendra phosphorea*; *Orphnaeus brevilabiatus*; *Orphnaeus brasilianus*; *Orphnaeus lineatus*; *Orphnaeus whitei*; geophilomorph centipedes; pantropical.

Ruling

- (1) Under the plenary power it is hereby ruled that the following specific names are suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *phosphorea* Linnaeus, 1758, as published in the binomen *Scolopendra phosphorea*;
 - (b) *lineatus* Newport, 1845, as published in the binomen *Geophilus lineatus*;
 - (c) *whitei* Newport, 1845, as published in the binomen *Geophilus whitei*.
- (2) The name *Orphnaeus* Meinert, 1870 (gender: masculine), type species by subsequent designation by Crabill (1968) *Orphnaeus lividus* Meinert, 1870 (a junior subjective synonym of *Geophilus brevilabiatus* Newport, 1845) is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *brevilabiatus* Newport, 1845, as published in the binomen *Geophilus brevilabiatus* (senior subjective synonym of *Orphnaeus lividus* Meinert, 1870, the type species of *Orphnaeus* Meinert, 1870);
 - (b) *brasilianus* Humbert & Saussure, 1870, as published in the binomen *Chomatobius brasilianus*.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
 - (a) *phosphorea* Linnaeus, 1758, as published in the binomen *Scolopendra phosphorea* and as suppressed in (1)(a) above;
 - (b) *lineatus* Newport, 1845, as published in the binomen *Geophilus lineatus* and as suppressed in (1)(b) above;
 - (c) *whitei* Newport, 1845, as published in the binomen *Geophilus whitei* and as suppressed in (1)(c) above.

History of Case 3227

An application to conserve the specific names of *Geophilus brevilabiatus* Newport, 1845 and *Chomatobius brasilianus* Humbert & Saussure, 1870 for two widely distributed species of geophilomorph centipedes (family ORYIDAE) by suppressing *Scolopendra phosphorea* Linnaeus, 1758, a senior synonym of *G. brevilabiatus*, and two senior synonyms of *C. brasilianus*: *G. lineatus* and *G. whitei*, both of Newport (1845) was received from Donatella Foddai and Alessandro Minelli (*Università degli Studi di Padova, Padova, Italy*) and Luis Alberto Pereira (*Universidad Nacional de La Plata, La Plata, R. Argentina*) on 21 March 2001. After correspondence the case was published in BZN 59: 85–89 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 87–88. At the close of the voting period on 1 December 2003 the votes were as follows: 20 Commissioners voted FOR the proposals, 1 Commissioner (van Tol) voted AGAINST, and 1 Commissioner (Bouchet) voted FOR proposals (1)(a), (3)(a) and (4)(a), AGAINST proposals (1)(b), (3)(b) and (4)(b) and (c) and abstained in proposal (2), no vote was received from Eschmeyer. Böhme and Patterson were on leave of absence.

Bouchet pointed out that the names *Geophilus lineatus* and *G. whitei* Newport, 1845 were not forgotten and type material existed for both, allowing an unambiguous application of the names. The application failed to mention whether type material of *Chomatobius brasilianus* Humbert & Saussure, 1870 existed. A total of fifteen citations was not a strong enough case to use the plenary power to set aside the Principle of Priority and conserve the name *Chomatobius brasilianus*.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- brasilianus*, *Chomatobius*, Humbert & Saussure, 1870, *Revue et Magasin de Zoologie Pure et Appliquée*, (2)22: 205.
- brevilabiatus*, *Geophilus*, Newport, 1845, *Transactions of the Linnean Society of London*, 19(9): 436.
- lineatus*, *Geophilus*, Newport, 1845, *Transactions of the Linnean Society of London*, 19(9): 436.
- Orphnaeus* Meinert, 1870, *Naturhistorisk Tidsskrift*, (3)7: 17
- phosphorea*, *Scolopendra*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 638.
- whitei*, *Geophilus*, Newport, 1845, *Transactions of the Linnean Society of London*, 19(9): 436.

The following is the reference for the designation of *Orphnaeus lividus* Meinert, 1870 as the type species of *Orphnaeus* Meinert, 1870:

Crabill, R.E., Jr. 1968. *Entomological News*, 79: 109.

OPINION 2072 (Case 3143)***Euphryne obesa* Baird, 1858 (currently *Sauromalus obesus*; Reptilia, Squamata): proposal to give the specific name precedence over that of *Sauromalus ater* Duméril, 1856 not approved**

Abstract. The Commission has ruled that the priority of the name *Sauromalus ater* Duméril, 1856 should be maintained. *Sauromalus ater* is the senior name for the chuckwalla (family IGUANIDAE) from the southwest of North America. A proposal had been made to give precedence to a junior subjective synonym *S. obesus* (Baird, 1858).

Keywords. Nomenclature; taxonomy; Reptilia; Squamata; IGUANIDAE; *Sauromalus ater*; *Sauromalus obesus*; chuckwallas; southwestern North America.

Ruling

- (1) The name *obesa* Baird, 1858 (specific name corrected under Article 34.2 of the Code), as published in the binomen *Euphryne obesus*, is not to be given priority over *Sauromalus ater* Duméril, 1856, as published in the binomen *Sauromalus ater*, whenever the two names are considered to be synonyms. The Principle of Priority is upheld and *S. ater* Duméril, 1856 has priority over *Euphryne obesa* Baird, 1858 whenever the two names are considered to be synonyms.
- (2) The name *Sauromalus* Duméril, 1856 (gender: masculine), type species by monotypy *Sauromalus ater* Duméril, 1856, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *ater* Duméril, 1856, as published in the binomen *Sauromalus ater* (specific name of the type species of *Sauromalus* Duméril, 1856);
 - (b) *obesa* Baird, 1858, as published in the binomen *Euphryne obesus*.

History of Case 3143

An application to conserve the specific name of *Euphryne obesa* Baird, 1858 (specific name corrected to agree in gender with the feminine generic name under Article 34.2 of the Code) for the chuckwalla (family IGUANIDAE) from the southwest of North America by giving it precedence over its junior subjective synonym *Sauromalus ater* Duméril, 1856 was received from Richard R. Montanucci (Clemson University, South Carolina), Hobart M. Smith and David Chiszar (University of Colorado), Kraig Adler (Cornell University, Ithaca, New York), David L. Auth (University of Florida, Gainesville), Ralph W. Axtell (Southern Illinois University, Edwardsville), Ted J. Case (University of California at San Diego), Joseph T. Collins (The Center for North American Amphibians and Reptiles, Lawrence, Kansas), Roger Conant (Albuquerque, New Mexico), Robert Murphy (Royal Ontario Museum, Ontario, Canada), Kenneth Petren (University of Cincinnati, Ohio) and Robert C. Stebbins (Kensington, California) on 10 September 1999. After correspondence the

case was published in BZN **58**: 37–40 (March 2001). The title, abstract and keywords of the case were published on the Commission's website. Comments opposing the application were published in BZN **58**: 307–308; BZN **59**: 45–48 and 205. Comments in support of the application were published in BZN **58**: 229; 307–308.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN **58**: 39. At the close of the voting period on 1 March 2003 the votes were as follows: 12 Commissioners voted FOR the proposals, 12 Commissioners (Alonso-Zarazaga, Bouchet, Brothers, Calder, Halliday, Kraus, Lamas, Macpherson, Minelli, Patterson, Rosenberg and van Tol) voted AGAINST, no votes were received from Cogger, Dupuis and Mahnert. Ng was on leave of absence.

Voting against, Alonso-Zarazaga commented that stability is not better achieved by reversing priority. A junior name should not be given precedence because of preference by a particular school, or as a result of the publication capacity by a given set of researchers. Also voting against, Halliday commented that the case rests on two arguments. First, that there is uncertainty surrounding the type locality of *S. ater*. This is irrelevant to the nomenclatural issue. Second, it is argued that *S. obesus* should be preferred because it is used in a greater number of papers than *S. ater*. There is no Article in the Code that invites the use of this argument, nor do the authors invoke any particular Article to support their case. The nearest relevant Article would be 23.9.3, however, both *S. ater* and *S. obesus* have been in continuous use for over 100 years. Therefore, the Principle of Priority should be upheld and the proposals should be rejected.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

ater, *Sauromalus*, Duméril, 1856, *Archives du Muséum d'Histoire Naturelle, Paris*, **8**: 536.
obesa, *Euphyryne*, Baird, 1858, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **10**: 253.

Sauromalus Duméril, 1856, *Archives du Muséum d'Histoire Naturelle, Paris*, **8**: 536.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described ...'. The Abstract will be prepared by the Commission's Secretariat.

References. These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in BZN 59: 159–160.

Submission of Application. One copy should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

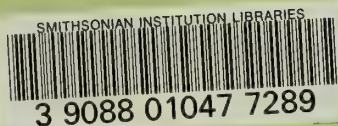
The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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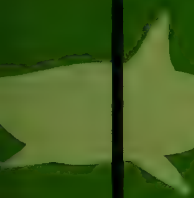
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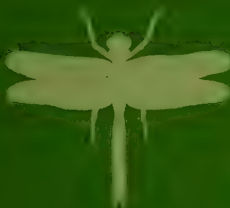
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 61, part 2 (pp. 77–132)

30 June 2004

Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume), as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be by e-mail to 'iczn@nhm.ac.uk' where possible.

(2) The Commission votes on applications six to eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to 'join-iczn-list@lyris.bishopmuseum.org', leaving the subject line and body of the message blank (for further details see BZN 59: 234).

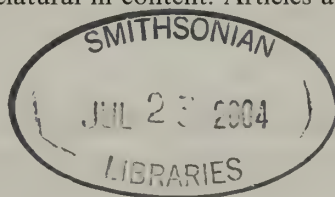
(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 61, part 1, 31 March 2004) went to press. Under Article 82 of the Code, existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 3309: *Rosacea* Quoy & Gaimard, 1827: proposed conservation of usage (Cnidaria, Siphonophora); *Desmophyes annectens* Haeckel, 1888 and *Rosacea plicata* Bigelow, 1911: proposed conservation. G.M. Mapstone & P.R. Pugh.

CASE 3311: *Bathyporeia elegans* Watkin, 1938 (Crustacea, Amphipoda): proposed conservation. C. d'U. d'Acoz & W. Vader.



CASE 3312: Proposal of part of the List of Available Names in Zoology (Coleoptera). Coleopterists' Society & European Association of Coleopterology.

CASE 3313: *Scissurella mantelli* Woodward, 1859 (Mollusca, Gastropoda): proposed suppression of neotype. D.L. Geiger & B. Marshall.

CASE 3314: *Trichiotinus* Casey, 1915 and *Stegopterus* Burmeister & Schaum, 1840 (Insecta, Coleoptera): proposed precedence over *Trichinus* Kirby, 1827 and *Tetrophthalmus* Kirby, 1827 respectively. A.B.T. Smith.

CASE 3315: *Eudendrium tenellum* Allman, 1877 (Cnidaria, Hydrozoa): proposed conservation of usage. A.C. Marques & W. Vervoort.

CASE 3316: *Hindia* Duncan, 1879 (Porifera): proposed conservation. J.K. Rigby.

CASE 3317: *Aphodius niger* Illiger, 1798 (Insecta, Coleoptera): proposed conservation of usage by suppression of *Scarabaeus niger* Panzer, 1797. F.-T. Krell, D.J. Mann, R.B. Angus & J.F. Maté.

Mr David Heppell (1937-2004)

We record with great regret the death on 24 April 2004 of David Heppell, a member of the Commission from 1972 to 2000. David started his professional life as a dentist, but joined the staff of what is now The Natural History Museum, London, in 1961 working in the Mollusca Section on a revision of the collections, in particular the bivalves. In 1966 he moved to the Royal Scottish Museum in Edinburgh, and remained there until his retirement when he went with his young family to live in Canada.

David Heppell had broad interests and knowledge within malacology. His main work lay in the British and northern Atlantic marine faunas, but extended through ethnographic uses of molluscs, to zoological frauds and fakes, and even to crypto-zoology. He made major contributions to unravelling and rationalising the complex nomenclatural history of the British marine molluscan fauna, particularly the Bivalvia. In 1986 he organised the highly memorable International Malacological Congress in Edinburgh. He was a former President of the Conchological Society and Editor of the *Journal of Conchology*. David was generous with his time and always ready to help colleagues with knotty nomenclatural problems.

Dr Philip K. Tubbs (1933-2004)

As announced in the previous issue of this journal, Dr Philip K. Tubbs, former Executive Secretary of the Commission and Editor of the *Bulletin of Zoological Nomenclature*, died on 22 January 2004, two years after his retirement. Philip had been University Lecturer in Biochemistry in the University of Cambridge, England, before becoming the Commission's Executive Secretary on 7 September 1985. During the 16 years of his devoted activity at the Commission's office in London, Dr Tubbs offered tremendous contributions, conceptual and editorial alike, towards the production of the current 4th Edition of the *International Code of Zoological Nomenclature*, and supervised the complex negotiations eventually leading to the Code's translations into Chinese, Czech, German, Japanese, Russian, and Spanish. His keen editorial hand also left a trace in the *Official Lists and Indexes of Names and*

Works in Zoology (1987) and its *Supplement* (2001), in the Centenary History of the Commission (1995) and in more than sixty issues of this *Bulletin*, where 615 Opinions were accurately edited under his professional care.

The four Commission Presidents who appreciated his invaluable help during so many years of joint work on zoological nomenclature warmly sign these lines of grateful appreciation of Philip's service to the Commission, during an important period of his active life, to the benefit of the international community of zoologists.

David Ride (President 1973-1977, 1983-1989)

Otto Kraus (President 1989-1995)

Alessandro Minelli (President 1995-2001)

Neal Evenhuis (President 2001-present)

The International Commission on Zoological Nomenclature and its publications

The respective roles of the International Commission on Zoological Nomenclature and of the International Trust for Zoological Nomenclature are described in BZN 61: 1-6, together with details of the following publications and how to obtain them:

The Bulletin of Zoological Nomenclature,

The International Code of Zoological Nomenclature,

The Official Lists and Indexes of Names and Works in Zoology,

Towards Stability in the Names of Animals – a History of the International Commission on Zoological Nomenclature 1895-1995.

Full details will also be found on the Commission's Website www.iczn.org.

Case 3316

Hindia Duncan, 1879 (Porifera): proposed conservation

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the name *Hindia* Duncan, 1879 for a fossil demosponge genus ranging from the Ordovician to the Devonian. The name is threatened by two senior synonyms, the virtually unused name *Sphaerolites* Hinde, 1875 and *Microspongia* Miller & Dyer, 1878, the name of a doubtfully recognisable taxon. The suppression of the two senior synonyms is proposed.

Keywords. Nomenclature; taxonomy; Porifera; HINDIIDAE; *Hindia*; *Sphaerolites*; *Microspongia*; fossil sponges; Ordovician; Silurian; Devonian.

1. The nominal genus *Microspongia* was established by Miller & Dyer (1878, p. 37) based on one new species, *Microspongia gregaria* (p. 37, pl. 2, fig. 2), from the upper part of the Cincinnati Group of Upper Ordovician age near Cincinnati, Ohio. They described the spicules as 'very minute and needle-shaped'.

2. The name of the demosponge genus *Hindia* was established by Duncan (1879, p. 91), with type species by monotypy *Hindia sphaeroidalis* Duncan, 1879 (p. 91, pl. 9, figs. 1–6). Duncan described the spicules as unattached, tripod-stemmed in shape, with swollen extremities and papillose limbs. He based his genus on fossils collected by Hinde from rocks of 'Lower Helderberg [Devonian] or Upper Silurian' age near Dalhousie, New Brunswick. These same specimens had earlier been described as the new genus and species *Sphaerolites nicholsoni* by Hinde (1875, p. 8), when they were thought to be corals. Rauff (1886, pp. 166–172) documented the spicular characters of the skeleton of *Hindia* and convincingly demonstrated their sponge nature. To the best of my knowledge the name *Sphaerolites* has not been used as a valid name for at least 40 years, probably much longer.

3. Ulrich (1890, pp. 228–229) noted that the types of *Microspongia gregaria* were lost and that the original definition of *Microspongia* was both inadequate to distinguish it from other genera with similar external forms and incorrect about the form of its spicules. He concluded that *Microspongia* was unrecognizable but that *Hindia* and *Microspongia* were probably identical. According to Finks (1960, p. 97), Ulrich also noted that he had seen topotype material of *Microspongia*, as identified by Miller, that was identical with *Hindia*. Finks also observed that R.S. Bassler had informed B.F. Howell that he had seen the types of *Microspongia*, before they were lost, and that they were identical to *Hindia*. Finks (1960, p. 97) concluded that, as *Hindia* had been more widely used than *Microspongia* and since the types of *Microspongia* were lost and had never been adequately described, he was retaining the name *Hindia* in his paper. In contrast, Howell (1940, p. 45) had concluded that

Microspongia Miller & Dyer, 1878 was the senior synonym of *Hindia* Duncan, 1879, and changed the name of the family from HINDIIDAE Rauff, 1894 (p. 327) to MICROSPONGIIDAE Howell, 1940 (p. 45).

4. In the *Treatise on Invertebrate Paleontology*, de Laubenfels (1955, p. E60) included *Hindia* as a junior synonym of *Microspongia* Miller & Dyer, 1878. He included *Microspongia* within the family ASTYLOSPONGIIDAE, Rauff, 1893 — a taxonomic decision firmly rejected by the current generation of sponge taxonomists because of significant differences in spicule structure between ASTYLOSPONGIIDAE and HINDIIDAE. As far as I am aware, the name *Microspongia* has not been used as valid since de Laubenfels (1955), except by Zhuravleva (1962, p. 56 in Russian; 1971, p. 61 in the English translation).

5. The nominal genus *Hindia* has been used for these fossil sponges extensively in North America (e.g. Hinde, 1884, p. 57; Rauff, 1894, p. 327; Foerste, 1903, p. 714; Schuchert & Twenhofel, 1910, p. 702; Bassler, 1932, pp. 76, 85; Bayer, 1967, p. 420; Rigby & Chatterton, 1989, pp. 34–35; 1999, pp. 17–18), in Europe (e.g. Roemer, 1885, p. 63; Hinde, 1887, p. 67; 1888, p. 116; Rauff, 1894, p. 338), and in Australia (Rigby & Webby, 1988, pp. 61–63), to cite only a few references, and stratigraphically from the Ordovician to the Devonian.

6. In order to conserve the current general usage of *Hindia* Duncan, 1879 in the forthcoming revision of the Porifera volume of the *Treatise on Invertebrate Paleontology*, I propose the suppression of the two senior synonyms *Sphaerolites* Hinde, 1875 and *Microspongia* Miller & Dyer, 1878.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power to suppress the following generic names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(a) *Microspongia* Miller & Dyer, 1878;

(b) *Sphaerolites* Hinde, 1875;

(2) to place on the Official List of Generic Names in Zoology the name *Hindia* Duncan, 1879 (gender: feminine), type species by monotypy *Hindia sphaeroidalis* Duncan, 1879;

(3) to place on the Official List of Specific Names in Zoology the name *sphaeroidalis* Duncan, 1879, as published in the binomen *Hindia sphaeroidalis* (specific name of the type species of *Hindia* Duncan, 1879);

(4) to place on the Official List of Family-Group Names in Zoology the name HINDIIDAE Rauff, 1894, type genus *Hindia* Duncan, 1879;

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:

(a) *Microspongia* Miller & Dyer, 1878 (as suppressed in (1)(a) above);

(b) *Sphaerolites* Hinde, 1875 (as suppressed in (1)(b) above);

(6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name MICROSPONGIIDAE Howell, 1940 (invalid because the name of the type genus has been suppressed in (1)(a) above).

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Case 3264**STAPHYLINIDAE Latreille, 1804 (Insecta, Coleoptera): proposed conservation of ten specific names**

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Abstract. The purpose of this application, in relation to Articles 23.9.3 and 23.9.5 of the Code, is the conservation of ten specific names (six junior primary homonyms, three junior secondary homonyms, and one junior synonym) that have been in use for many years for rove beetles (family STAPHYLINIDAE). None of the species denoted by the homonyms has been considered congeneric after 1899. Conservation would confer the greatest stability in the naming of these staphylinid taxa.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; rove beetles.

1. This application seeks to conserve six junior primary homonyms, three junior secondary homonyms, and one junior synonym that are used for rove beetles (family STAPHYLINIDAE). In four cases (see Table 1, nos. 6–9), both the senior and junior primary homonyms are in current use and the species they represent have not been considered congeneric after 1899. These cases are submitted to the Commission under the provisions of Article 23.9.5.

2. In two cases (see Table 1, nos. 4–5), the primary homonyms represent species that have not been considered congeneric after 1899 and the senior names have been junior synonyms since before 1899. However, the junior names have not been used a sufficient number of times in the last 50 years to satisfy the requirements of Article 23.9.1.2. These cases are presented to the Commission for action under Article 23.9.3.

3. In two cases of secondary homonymy (see Table 1, nos. 2–3) the senior names have been junior synonyms since before 1899, but the junior names do not fulfil the usage requirements of Article 23.9.1.2. These cases are submitted under Article 23.9.3. In the third case of secondary homonymy (see Table 1, no. 1), the senior name has never been cited as a junior synonym, but has remained unused since 1839, whereas the junior name has been in constant although infrequent use. The case for conserving this name is submitted under Article 23.9.3.

4. In the case of the synonymy (see Table 2), the junior name *Paederus limnophilus* Erichson, 1840 (p. 653) has been cited a sufficient number of times (by 21 authors in 27 articles in the last 50 years) to allow its ‘automatic’ protection under Article 23.9.1.2. However, Frank (1988) used the older name for this species, *Paederus limophilus* Heer, 1839 (p. 235), which had otherwise not been used since Kraatz (1857), thereby preventing ‘automatic’ protection of *P. limnophilus* under Article 23.9.1.

5. The homonyms and synonyms (with associated details) are presented in Table 1 and Table 2 respectively. The usage of these names in the last 50 years is summarized

in the tables. Full details of usage are held by the Commission Secretariat and are available on request in electronic or hard copy.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that:
 - (a) the specific names in column 2 of Table 1, as originally published in binomina with the generic names in column 5 of Table 1, are not invalid by reason of their being junior primary homonyms, in nos. 4–9 of Table 1, or junior secondary homonyms, in nos. 1–3 of Table 1, of the specific names in column 4 of Table 1;
 - (b) the specific name *limnophilus* Erichson, 1840 (Table 2, column 1), as originally published in a binomen with *Paederus* (Table 2, column 1), is to be given precedence over the specific name *limophilus* Heer, 1839 (Table 2, column 3), as originally published in a binomen with *Paederus* (Table 2, column 3), whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) the specific names in column 4 of Table 1, as originally published in the binomina with generic names in column 5 of Table 1;
 - (b) the specific names in column 2 of Table 1, as originally published in binomina with generic names in column 5 of Table 1, ruled in (1a) above to be not invalid by reason of being junior homonyms of the names in column 4 of Table 1;
 - (c) the specific name *limnophilus* Erichson, 1840 (Table 2, column 1), as originally published in a binomen with *Paederus* (Table 2, column 1), with the endorsement, as ruled in (1)(b) above, that it is to be given precedence over *limnophilus* Heer, 1839 (Table 2, column 3), as originally published in a binomen with *Paederus* (Table 2, column 3), whenever they are considered to be synonyms;
 - (d) the specific name *limnophilus* Heer, 1839 (Table 2, column 3), as originally published in a binomen with *Paederus* (Table 2, column 3), with the endorsement, as ruled in (1)(b) above, that it not be given priority over *limnophilus* Erichson, 1840 (Table 2, column 1), as originally published in a binomen with *Paederus* (Table 1, column 1), whenever they are considered to be synonyms.

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Table 1. 9 specific names (junior homonyms) proposed for conservation, with their senior homonyms and other information**KEY:**

Names are arranged in alphabetical order and the numbers applied to them have relevance only within the table.

s.h. – senior homonym; j.h. – junior homonym; j.s. – junior synonym; j.p.h. – junior primary homonym; j.s.h. – junior secondary homonym.

No. (column 1)	Junior homonyms proposed for conservation (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
1	<i>Astenus dimidiatus</i> (Wollaston, 1864, p. 591)	Canary Islands	<i>Astenus dimidiatus</i> Stephens, 1833, p. 277	s.h. described in <i>Astenus</i> j.h. originally described in <i>Sunius</i> Stephens, 1829	j.s.h. cited by 6 authors in 7 articles in last 50 years s.h. unused after 1839 (Stephens, 1839, p. 408), specimens of type series not found and name declared nomen dubium (Lott & Herman, in press) j.s.h. cited by 2 authors in 3 articles in last 50 years s.h. = j.s. of either <i>Astenus procerus</i> (Gravenhorst, 1806) or <i>Astenus</i> <i>filiformis</i> (Latreille, 1806), since 1840 (Erichson, 1840, p. 932)	Article 23.9.3
2	<i>Astenus filum</i> (Aubé, 1850, p. 317)	North Africa	<i>Astenus filum</i> (Waltl, 1838, column 267)	s.h. originally described in <i>Paederus</i> Fabricius, 1775 j.h. originally described in <i>Sunius</i> Stephens, 1829	s.h. = j.s. of either <i>Astenus procerus</i> (Gravenhorst, 1806) or <i>Astenus</i> <i>filiformis</i> (Latreille, 1806), since 1840 (Erichson, 1840, p. 932)	Article 23.9.3
3	<i>Astenus rutilipennis</i> Reitter, 1909, p. 151	Caucasus, Czech Republic, Slovakia	<i>Astenus rutilipennis</i> (Chevrolat, 1860, p. 410)	s.h. described in <i>Sunius</i> Stephens, 1829 j.h. described in <i>Astenus</i>	j.h. cited by 7 authors in 8 articles in last 50 years s.h. = j.s. of <i>Astenus filum</i> (Aubé, 1850) since 1865 (Fauvel, 1865, p. 17) Examples 2 and 3 are interrelated in that if <i>Astenus filum</i> (Aubé) is replaced by its next oldest synonym, <i>A. rutilipennis</i> (Chevrolat), and <i>A. rutilipennis</i> Reitter is replaced then the name <i>A. rutilipennis</i> will still be used but for a different species, in a different subgenus, from a different region	Article 23.9

4	<i>Astenus unicolor</i> (Mulsant & Rey, 1878, p. 276)	France, Italy	a. <i>Pseudomacdon</i> <i>unicolor</i> (Stephens, 1839, p. 407) b. <i>Pseudomacdon</i> <i>unicolor</i> (Curtis, 1840, p. 277)	<i>Sinuius</i> Stephens, 1829	j.h. cited by 2 authors in 4 articles in last 50 years; never congeneric with a or b a and b moved from <i>Sinuius</i> in 1858 (Waterhouse, 1858, p. 27); a and b = j.s. of <i>Pseudomacdon</i> <i>absolatus</i> (Nordmann, 1837) and unused after 1858 (Waterhouse, 1858, p. 27)	Article 23.9.3
5	<i>Lathrobium</i> <i>fulvipes</i> Adachi, 1955, p. 30	Japan	<i>Pinophilus</i> <i>fulvipes</i> (Blanchard, 1842, p. 85)	<i>Lathrobium</i> Gravenhorst, 1802	j.h. cited by 3 authors in 4 articles in last 50 years s.h. = j.s.h. of <i>Lathropinus fulvipes</i> (Erichson, 1840); j.s. of <i>Pinophilus</i> <i>blanchardi</i> Fauvel, 1887; has been in <i>Lathropinus</i> Sharp, 1886, or <i>Pinophilus</i> Gravenhorst, 1802, since 1887 (Fauvel, 1887, p. 233)	Article 23.9.3
6	<i>Lathrobium</i> <i>pallipes</i> Sharp, 1889, p. 257	China, Japan, Korea	<i>Homacotarsus</i> <i>pallipes</i> (Gravenhorst, 1802, p. 179)	<i>Lathrobium</i> Gravenhorst, 1802	s.h. and j.h. valid; never congeneric; s.h. moved from <i>Lathrobium</i> in 1837 (Nordmann, 1837, p. 149)	Article 23.9.5
7	<i>Lobrathium</i> <i>badius</i> (Cameron, 1924, p. 193)	India	<i>Homacotarsus</i> <i>badius</i> (Gravenhorst, 1802, p. 53)	<i>Lathrobium</i> Gravenhorst, 1802	s.h. and j.h. valid; never congeneric; s.h. moved from <i>Lathrobium</i> in 1840 (Erichson, 1840, p. 562)	Article 23.9.5
8	<i>Mimopiniophilus</i> <i>tenuis</i> (Fagel, 1963, p. 216)	Democratic Republic of the Congo	<i>Lathropinus</i> <i>tenuis</i> (Sharp, 1876, p. 323)	<i>Pinophilus</i> Gravenhorst, 1802	s.h. and j.h. valid; never congeneric; s.h. moved from <i>Pinophilus</i> in 1886 (Sharp, 1886, p. 628)	Article 23.9.5
9	<i>Platydomene</i> <i>bicolor</i> (Erichson, 1840, p. 593)	Europe, North Africa	a. <i>Homacotarsus</i> <i>bicolor</i> (Gravenhorst, 1802, p. 179) b. <i>Lathrobium</i> <i>bicolor</i> Heer, 1839, p. 240	<i>Lathrobium</i> Gravenhorst, 1802	a. valid name; moved from <i>Lathrobium</i> in 1840 (Erichson, 1840, p. 563) b. Unused since at least 1868 (Gemminger & Harold, 1868, p. 609); j.p.h. of a	a. Article 23.9.5 b. Articles 23.9.1 and 23.9.2

Table 2. Specific name (junior synonym) proposed for conservation, with other information
KEY:
s.s. – senior synonym; j.s. – junior synonym.

Synonym proposed for conservation (column 1)	Geographic distribution of species referred to by the synonyms (column 2)	Synonym proposed not to be given priority (column 3)	Notes (column 4)	Code (column 5)
<i>Paederus linnophilus</i> Erichson, 1840, p. 653	Europe	<i>Paederus linnophilus</i> Heer, 1839, p. 235	j.s. cited as valid by 21 authors in 27 articles in last 50 years s.s. cited as invalid synonym of <i>P. linnophilus</i> from 1857 (Kraatz, 1857, p. 729) until resurrected in 1988 (Frank, 1988, p. 118; see also Willers, 2001, p. 189, and Assing & Schülke, 2001, p. 131) thereby preventing automatic protection of j.s. under Article 23.9.1.1	Article 23.9.3

Case 3275***Metromenus* Sharp, 1884 (Insecta, Coleoptera): proposed conservation of usage by designation of *Dyscolus palmae* Blackburn, 1877 as the type species**

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Abstract. The purpose of this application, under Article 70.2 of the Code, is to conserve the usage of the name *Metromenus* Sharp, 1884 for a group of ground beetles (CARABIDAE) by validating Lorenz's (1998) designation of *Dyscolus palmae* Blackburn, 1877 (currently *Blackburnia palmae*) as the type species. The valid type species by monotypy is *Anchomenus mysticus* Blackburn, 1877. However, acceptance of this type species fixation would cause confusion, as it does not match the current and universally accepted concept of *Metromenus*.

Keywords. Nomenclature; taxonomy; Coleoptera; CARABIDAE; *Blackburnia*; *Anchomenus mysticus*; *Metromenus palmae*; Hawaii; ground beetles.

1. Sharp (1884, p. 217) described the genus *Metromenus* for a group of ground beetles (family CARABIDAE) from Hawaii. *Anchomenus mysticus* Blackburn, 1877 (p. 147) is the only species mentioned in his original description of the genus and is thus the type species by monotypy.

2. Blackburn & Sharp (1885) included 19 species in *Metromenus*: *Dyscolus palmae* Blackburn, 1877 (p. 147) was the first-listed species, whereas *Anchomenus mysticus* Blackburn, 1877 was listed last.

3. Sharp (1903) expanded the treatment of *Metromenus* Sharp, 1884, recognizing 26 species, 13 newly described. *Metromenus palmae* (Blackburn, 1877) was again listed first among the species. He placed *Anchomenus mysticus* Blackburn, 1877 in a new genus, *Mysticomenus* Sharp, 1903.

4. Lorenz (1998, p. 116) invalidly designated *Dyscolus palmae* Blackburn, 1877 as the type species of *Metromenus* Sharp, 1884.

5. Bousquet (2002) noted the mention of only *Anchomenus mysticus* Blackburn, 1877 in Sharp's (1884) generic description of *Metromenus* and stated that 'strict

adherence to the Code would imply that the type species of *Metromenus* Sharp, 1884 (currently a valid subgenus of *Blackburnia* Sharp, 1878) is *Anchomenus mysticus* Blackburn, 1877, by monotypy'. However, as this was no longer in accord with the accepted concept of *Metromenus*, Bousquet suggested that the Commission be asked to validate Lorenz's (1998) invalid designation of *Dyscolus palmae* Blackburn, 1877 as type species of *Metromenus*. After 1885, all uses of the name *Metromenus* Sharp, 1884 have been consistent with the usage of the name as understood by Blackburn & Sharp (1885) and Lorenz (1998; see para. 4 above) (e.g. Timberlake, 1918; Swezey, 1954; Liebherr & Zimmerman, 1998; 2000).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all fixations of type species for the nominal genus *Metromenus* Sharp, 1884 before the designation of *Dyscolus palmae* Blackburn, 1877 by Lorenz (1998);
- (2) to place on the Official List of Generic Names in Zoology the name *Metromenus* Sharp, 1884 (gender: masculine), type species by subsequent designation by Lorenz (1998) *Dyscolus palmae* Blackburn, 1877, as ruled in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the name *palmae* Blackburn 1877, as published in the binomen *Dyscolus palmae* (specific name of the type species of *Metromenus* Sharp, 1884).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*: they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3288***Nicrophorus tomentosus* Weber, 1801 (Insecta, Coleoptera): proposed conservation of the specific name**

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Abstract. The purpose of this application, in relation to Article 23.9.3 of the Code, is to conserve the widely used specific name *Nicrophorus tomentosus* Weber, 1801 for a Nearctic species of burying beetle (family SILPHIDAE) by suppressing its assumed senior, but less frequently used, synonym *N. velutinus* Fabricius, 1801. This species is widely studied by biologists and so nomenclatural stability is particularly important.

Keywords. Nomenclature; taxonomy; Coleoptera; SILPHIDAE; NICROPHORINAE; *Nicrophorus tomentosus*; *Nicrophorus velutinus*; burying beetles; Nearctic.

1. Species of the genus *Nicrophorus* Fabricius, 1775 (p. 71) (family SILPHIDAE, subfamily NICROPHORINAE) are large, colorful beetles commonly called 'burying beetles' due to their unique reproductive strategy (interment of small vertebrate carcasses as breeding resources). These beetles have a considerable presence in the popular literature (field guides, magazines, websites, etc.) and have been the focus of intense behavioral, ecological, and conservation research over the last two decades; there were over 444 publications up to 1980 (see Sikes et al., 2002).

2. The names *Nicrophorus tomentosus* Weber, 1801 (p. 47) and *N. velutinus* Fabricius, 1801 (p. 334) were described in the same year for the same common Nearctic species of burying beetle. Fabricius (1801, p. 334) spelt the generic name *Necrophorus*, but this was an unjustified emendation of the spelling *Nicrophorus* established by Fabricius (1775, p. 71) (see Hatch, 1932; Herman, 1964).

3. Efforts have failed to establish the exact dates of publication of Weber (1801) and Fabricius (1801) based on inspection of these volumes in the library of The Natural History Museum, London. The preface of the Weber work is signed 'Scriebam Kiliae Calendis Augusti mdecc [1800]' and the preface of the Fabricius work is marked 'Dab. Kiliae d. 10 April 1801.' This suggests Weber's work was written, but not necessarily published, before that of Fabricius (Max Barclay, in litt., 6 December 2001).

4. Kirby (1837, p. 96) acted as First Reviser in selecting *N. velutinus* as the valid name (see Article 24.2) and LeConte (1853, p. 277) considered *N. velutinus* Fabricius

to be the valid name, given the greater availability of Fabricius's (1801) work. However, despite this, *N. tomentosus* has been considered the senior and valid name by the majority of authors who have published on this species since its use by Hatch (1927, p. 363).

5. In fact, *N. tomentosus* Weber, 1801 has been used as the valid name for this species by over 89 different authors in at least 149 publications (the Commission Secretariat holds these references; see also Sikes et al., 2002). Over 55 of these have been non-taxonomic papers (e.g. behavior, ecology and conservation, 7 of them using the name *N. tomentosus* in their titles). Twenty-two publications that used this name as valid appeared before 1927 and over 127 have appeared since. During the period 1990 to 2000 this name was used in an average of 4.5 publications per year. This species (under the name *N. tomentosus*) has been used as a model organism and thus has been the central focus of investigation in at least 19 non-taxonomic, primarily behavioral and ecological, publications.

6. However, *N. velutinus* Fabricius, 1801 has been used as the valid name for this species in only 19 publications by 16 different authors (see Sikes et al., 2002). All but one of these publications (see Osten-Sacken, 1862, on behavior) have been taxonomic or faunistic in focus (many are simple check-lists). During the last 50 years this name has been considered valid in only one paper (Gersdorf, 1970, p. 366). Prior to this paper the name had not been used as valid since Portevin (1926, p. 245).

7. Article 23.9.1 attempts to conserve established usage of names by ensuring that a younger name in prevailing usage is not displaced by an older but long-unused name. However, because the name *N. velutinus* Fabricius, 1801 was used as valid after 1899 by three authors in five publications (Portevin, 1903, p. 331; 1925, p. 170; 1926, p. 245; Heyne & Taschenberg, 1908, p. 38; Gersdorf, 1970, p. 366), the name cannot be made a nomen oblitum as the criteria of Article 23.9.1.1 are not met. In this case the application of the Principle of Priority to use the senior synonym *N. velutinus* over the junior name *N. tomentosus* would greatly destabilize nomenclature. This action would most probably result in considerable confusion, because the junior name would almost certainly continue to be used by many authors (especially ecologists and ethologists who often use this species as a model organism).

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *velutinus* Fabricius, 1801, as published in the binomen *Nicrophorus velutinus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *tomentosus* Weber, 1801, as published in the binomen *Nicrophorus tomentosus*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *velutinus* Fabricius, 1801, as published in the binomen *Nicrophorus velutinus* and as suppressed in (1) above.

Acknowledgements

We thank Max Barclay (The Natural History Museum, London) for his attempt to find the exact publication date for Weber (1801) and Fabricius (1801) works in the Museum's Library. Ron Madge has helped with countless aspects of our NICROPHORINAE revisionary work. Al Newton has repeatedly helped us solve

nomenclatural riddles and critically reviewed this manuscript. This work was funded in part by grant DEB-9981381 from the National Science Foundation to Stephen Trumbo, grants from the Slater Fund of the Department of Ecology and Evolutionary Biology at the University of Connecticut and an Ernst Mayr Grant from Harvard's Museum of Comparative Zoology to Derek Sikes.

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Case 3293

***Nicrophorus olidus* Matthews, 1888 (Insecta, Coleoptera): proposed precedence over *Nicrophorus quadricollis* Gistel, 1848**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to give precedence to the widely used name *Nicrophorus olidus* Matthews, 1888 for a species of burying beetle (family SILPHIDAE) over the little used name *Nicrophorus quadricollis* Gistel, 1848 whenever the two names are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Coleoptera; SILPHIDAE; NICROPHORINAE; *Nicrophorus olidus*; *Nicrophorus quadricollis*; burying beetles; Nearctic.

1. Species of the genus *Nicrophorus* Fabricius, 1775 (p. 71) (family SILPHIDAE, subfamily NICROPHORINAE) are large, colorful beetles commonly called 'burying beetles' due to their unique reproductive strategy (interment of small vertebrate carcasses as breeding resources). These beetles have a considerable presence in the popular literature (field guides, magazines, websites, etc.) and have been the focus of intense behavioral, ecological, and conservation research over the last two decades; there were over 444 publications up to 1980 (see Sikes et al., 2002).

2. Gistel (1848, 1857a, b) proposed a number of *Nicrophorus* species names, including *Nicrophorus quadricollis* Gistel, 1848 (p. 190). As far back as Strand (1917), these have long been a source of confusion in the taxonomy of *Nicrophorus*. It is understood that there are no type specimens for these nominal species (G. Scherer, Zoological Museum of Munich, in litt. 1984 as cited in Peck & Anderson, 1985). Mroczkowski (1959, p. 65) commented 'they [the *Nicrophorus* species names used by Gistel] are almost certainly synonyms . . .'. Hatch (1928) and others have treated Gistel's names as nomina dubia. A study of translations of the original descriptions combined with a thorough knowledge of diagnostic characters in the genus indicates that Gistel's *Nicrophorus* species names most probably have better-known synonyms (see Sikes et al., 2002).

3. Gistel's description of *Nicrophorus quadricollis* Gistel, 1848 (type locality Mexico) matches the diagnostic characteristics of the Mexican species widely known as *Nicrophorus olidus* Matthews (1888, p. 92). Gistel's name is older and so has priority over Matthews's name.

4. The name *Nicrophorus olidus* Matthews is the only name that has been used as valid for this species and has appeared in at least 24 different publications by 17 different authors during the years 1924–2001 (the Commission Secretariat holds these references; see also Sikes et al., 2002). At least six of these publications were primarily ecological in focus.

5. However, the name *Nicrophorus quadricollis* Gistel has appeared in only four publications by three authors since Gistel's original description (1848, p. 190) and redescription (1857, p. 565). Strand (1917, p. 83) considered the name a nomen dubium. Hatch (1928, p. 153) considered the name incertae sedis. Blackwelder (1944, p. 100; 1973, p. 6) considered the name valid but listed it without synonyms (i.e. he did not consider the name a senior synonym of *N. olidus*, which he also listed as valid). Thus, Gistel's name, *Nicrophorus quadricollis*, has never been considered the senior synonym of any name.

6. Despite the goal of Article 23.9.1 to preserve the stability of established usage against unused senior synonyms, the name *N. quadricollis* Gistel, 1848 cannot automatically be made a nomen oblitum, because one author (Blackwelder, 1944, 1973) used it as a valid name after 1899 in two checklist publications. However, adherence to the Principle of Priority in this case and use of *N. quadricollis* over the junior name *N. olidus* would destabilize nomenclature. Accordingly, we propose that the Commission give the name *N. olidus* precedence over the name *N. quadricollis* whenever they are considered to be conspecific.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *olidus* Matthews, 1888, as published in the binomen *Nicrophorus olidus*, precedence over the name *quadricollis* Gistel, 1848, as published in the binomen *Nicrophorus quadricollis*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the names:
 - (a) *olidus* Matthews, 1888, as published in the binomen *Nicrophorus olidus*, with the endorsement that it is to be given precedence over the name *quadricollis* Gistel, 1848, as published in the binomen *Nicrophorus quadricollis*, whenever the two are considered to be synonyms;
 - (b) *quadricollis* Gistel, 1848, as published in the binomen *Nicrophorus quadricollis*, with the endorsement that it is not to be given priority over the name *olidus* Matthews, 1888, as published in the binomen *Nicrophorus olidus*, whenever the two are considered to be synonyms.

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Case 3282

***Thecla azia* Hewitson, 1873 (Insecta, Lepidoptera): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve, under Article 23.9.3 of the Code, the specific name *Thecla azia* Hewitson, 1873 (currently *Ministrymon azia*) for a common and widespread New World species of lycaenid butterfly that is of scientific interest. The name is threatened by resurrection of a senior synonym, *T. guacanagari* Wallengren, 1860, which was used only once in 1969 and not again since then.

Keywords. Nomenclature; taxonomy; Lepidoptera; LYCAENIDAE; THECLINAE; *Ministrymon azia*; migration; legume feeder; hairstreak butterfly.

1. Hewitson (1873, p. 144) gave the name *Thecla azia* to a common and widespread New World species of hairstreak butterfly (family LYCAENIDAE; subfamily THECLINAE). It occurs from southern Brazil, Paraguay, Argentina, and northern Chile to the United States, and was placed in its current genus (*Ministrymon* Clench, 1961) by Johnson & Miller (1991). This species is migratory (Beebe, 1951) and also appears to disperse passively using seasonal winds (Robbins & Small, 1981). Its larvae eat the blossom buds, flowers and leaves of Fabaceae (Boscoe, 1982; Cock, 1985; Harley et al., 1995). Most importantly, the name *T. azia* has been frequently used over the last century, including all major faunal books for the New World (e.g. Draudt, 1919–1921; Clench, 1961; Howe, 1975; Scott, 1986; Smith et al., 1994 and D'Abrera, 1995). Besides the citations already listed in this paragraph, a list of 50 other citations involving 65 authors is held by the Commission Secretariat; these include at least 25 works by at least ten authors in the last 50 years (see Article 23.9.1.2). Many more could easily have been added.

2. However, Article 23.9.2 cannot be used to 'automatically' reverse precedence as an earlier name *Thecla guacanagari* Wallengren, 1860 (p. 37) was noted as a senior subjective synonym of *T. azia* Hewitson, 1873 in a faunal list by Ebert (1969). It has not been listed or used since. Robbins & Lamas (2002) confirmed that these names refer to the same species.

3. The International Commission on Zoological Nomenclature is accordingly asked:
(1) to use its plenary power to suppress the name *guacanagari* Wallengren, 1860, as published in the binomen *Thecla guacanagari*, for the purposes

of the Principle of Priority but not for those of the Principle of Homonymy;

- (2) to place on the Official List of Specific Names in Zoology the name *azia* Hewitson, 1873, as published in the binomen *Thecla azia*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *guacanagari* Wallengren, 1860, as published in the binomen *Thecla guacanagari* and as suppressed in (1) above.

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Case 3285***Pemphigus* Hartig, 1839 (Insecta, Hemiptera, APHIDIDAE): proposed conservation**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the generic name *Pemphigus* Hartig, 1839 for a group of aphids of economic importance by suppression of the senior subjective synonym *Rhizobius* Burmeister, 1835.

Keywords. Nomenclature; taxonomy; Hemiptera; APHIDIDAE; *Pemphigus*; *Pemphigus bursarius*; *Rhizobius*.

1. The genus *Rhizobius* was established by Burmeister (1835, p. 87) to include *Rhizobius pilosellae* sp. nov., a junior synonym of *Pemphigus bursarius* (Linnaeus, 1758) and *R. pini* sp. nov. (currently *Prociphilus pini* (Burmeister, 1835)). Passerini (1860, p. 30) subsequently designated *Rhizobius sonchi* Passerini, 1860 (a junior synonym of *Pemphigus bursarius*) as the type species of *Rhizobius* Burmeister, 1835. This was an invalid act, because *R. sonchi* was not one of the species originally included in *Rhizobius*. Wilson (1910, p. 153) validly designated *R. pilosellae* as the type species of *Rhizobius*. *Rhizobius* is the type genus of the family-group name RHIZOBIINAE Passerini, 1862 (p. 202).

2. The genus *Pemphigus* was described by Hartig (1839, p. 645) to include *P. bursarius* (Linnaeus), *P. fraxini* Fabricius (currently *Prociphilus fraxini* (Fabricius, 1777)) and *P. quercus* Hartig (a nomen nudum according to Remaudière & Remaudière (1997)) and is currently in use. Its type species is *Aphis bursaria* Linnaeus, 1758, subsequently designated by Fitch (1855, p. 73, footnote). *Pemphigus* includes 66 species, according to Remaudière & Remaudière (1997), Zhang & Qiao (1997) and Coffin & Remaudière (2001). It is the type genus of the family-group name PEMPHIGINI Herrich-Schaefer, 1854 (p. viii, as *Pemphigiden*). *Pemphigus* is already on the Official List of Generic Names in Zoology (Opinion 1019, 1974).

3. *Rhizobius* and *Pemphigus* are subjective synonyms because their type species are also subjective synonyms. However, there has always been a single taxonomic concept despite differences in name usage. Following the Principle of Priority, *Rhizobius* (1835) has priority over *Pemphigus* (1839).

4. The last three uses of the generic name *Rhizobius*, not counting reviews or catalogues, have been the description of *Rhizobius viridis* by Theobald (1915, p. 184) (= *Prociphilus xylostei* (De Geer)), the record of *Rhizobius graminis* Buckton, 1883 (= *Aploneura lentisci* (Passerini)) (Willcocks, 1925, p. 122) and a synonymic note on *Rhizobius graminis* Buckton (Laing, 1927).

5. The name *Rhizobius* Burmeister, 1835 is no longer in use since it has been considered a junior homonym of *Rhyzobius* Stephens, 1829 (Coleoptera, COCCINELLIDAE), emended to *Rhizobius* by Agassiz, 1846. However, *Rhizobius* Burmeister and *Rhyzobius* Stephens are not homonyms, since there is a one-letter difference (see Article 56.2) and *Rhizobius* Agassiz is a junior homonym of Burmeister's name. This was already mentioned by Eastop & Hille Ris Lambers (1976, p. 374) by stating that '*Rhizobius* Burmeister, 1835 is not preoccupied by *Rhizobius* Stephens as this spelling is an emendation by Agassiz, 1846 of a generic name originally spelled *Rhyzobius* Stephens, 1829'.

6. The provisions of Article 23.9.1 do not apply here, making impossible the automatic reversal of precedence, because the name has been used after 1899 (see para. 4). Following Article 23.9.3, this case requires referral to the Commission for a ruling under the plenary power (Article 81). While the case is under consideration use of the junior name is to be maintained (Article 82). Any return to the use of the generic name *Rhizobius* instead of *Pemphigus* would greatly affect stability and universality of nomenclature, causing unnecessary confusion. *Pemphigus* is used in combination with 66 specific names with regularity. A list of 53 references by 57 authors using *Pemphigus* and covering the years 1902–2002 is held by the Commission Secretariat (e.g. Aoki, 1975; Heie, 1980; Hardie, 1987; Moran, 1993; Blackman & Eastop, 1994). Moreover, the valid tribal name would be based on the synonym *Pemphigus*. A further matter of confusion would be the misspelling or emendation of the beetle genus *Rhyzobius* to *Rhizobius*, as often happens. Confusion resulting from use of the older name could affect well-known species of economic importance. Several species (e.g. *P. bursarius*, *P. populitransversus* (Riley)) are well known to farmers, agronomists and forestry experts. *P. passeki* Börner and *P. phenax* Börner & Blunck can affect roots of caraway (*Carum carvi*) and carrots respectively (Blackman & Eastop, 2000).

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *Rhizobius* Burmeister, 1835 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to emend the entry on the Official List of Generic Names in Zoology for *Pemphigus* Hartig, 1839 to record that it is conserved by suppression of *Rhizobius* Burmeister, 1835;
- (3) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Rhizobius* Burmeister, 1835, as suppressed in (1) above.

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Comment on the proposed designation of *Isoospora suis* Biester, 1934 as the type species of *Isoospora* Schneider, 1881 (Protista, Apicomplexa)
(Case 3187; see BZN 58: 272–274; 59: 125–128)

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The issue of the designation of a type species for the genus *Isoospora* Schneider, 1881 (Protista, Apicomplexa) was discussed at the 10th International Congress of Parasitology in Vancouver, Canada, August 9, 2002. The discussion was part of the American Society of Parasitologists Coccidiosis Conference, Chaired by D.S. Lindsay and L. Choromanski. David Modry, who proposed (Case 3187; BZN 58: 272–274) that *Isoospora suis* Biester, 1934 be the type species of the genus *Isoospora* Schneider, 1881, presented his thoughts in the presentation 'Proposed designation of a new type species of the genus *Isoospora* — consequences for taxonomy of isosporan coccidians'. Steve J. Upton, who has opposed this designation (BZN 59: 125–128), detailed his views in the presentation 'Some historical perspectives on taxonomic problems associated with the genus *Isoospora*'. Members of the American Society of Parasitologists Nomenclature and Terminology Committee were encouraged to attend and their input was solicited by Drs Modry and Upton. Productive discussions were held after the presentations.

The following consensus was achieved:

1. The mammal isosporans arose early from the EIMERIIDAE and belong in the SARCOCYSTIDAE, whereas the avian isosporans arose later out of the *Eimeria* lineage (Carreno & Barta, 1999; Morrison et al., 2004).

2. Because the avian isosporans were described first in a historical content, and represent the bulk of the isosporans, they should remain *Isoospora* and the members in the SARCOCYSTIDAE should be termed *Cystoisospora* as proposed by Frenkel (1977).

3. Because there are presently not sufficient data on morphology in conjunction with molecular biology for any of the avian *Isoospora*, no type species should be assigned at this time for avian *Isoospora*.

4. *Isoospora suis* Biester, 1934 has all the morphological and molecular features of mammalian isosporiid coccidia studied to date (Box et al., 1980; Lindsay et al., 1983; Carreno et al., 1998; Carreno & Barta, 1999; Franzen et al., 2000; Barta et al., 2001; Modry et al., 2001) but does not form tissue cysts in paratenic hosts (Pinckney et al., 1993).

5. The feline coccidium *Cystoisospora felis* meets all morphological (Shah, 1970; McKenna & Charleston, 1982), biological (Dubey & Frenkel, 1972; Frenkel & Dubey, 1972) and molecular characteristics (Carreno & Barta, 1999; Morrison et al., 2004) of the mammalian isosporans.

However, I am aware that not all fellow workers in this field are in agreement with the points raised above. I therefore suggest that this issue be left open for the time

being and that further discussions and possibly further research be undertaken before the Commission is asked to make a final ruling.

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Comment on the proposed precedence of *Ovula gisortiana* Passy, 1859 over *Cypraea coombii* J. de C. Sowerby in Dixon, 1850 (Mollusca, Gastropoda)
(Case 3220; see BZN **59**: 173–175; **60**: 218–220; **61**: 40–42)

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The concluding statement to my previous comment was excluded from the printed version (BZN **60**: 218–220). It is given here as it summarises my primary objections to Pacaud & Dolin's proposal: 'in the future by using appropriate techniques it may be possible to demonstrate that *G. gisortiana* is a subjective synonym of *G. coombii*, and that the type species of *Gisortia* would then be correctly known under that name. However, given the lack of systematic or other detailed work on *Gisortia* over the past 70 years, rather than passing references to this strange looking cowry, I believe that were this to happen systematic stability would be essentially unaffected'.

A major concern with Pacaud & Dolin's application is that they have failed to demonstrate whether any of it is necessary. So are the two species synonymous? In the last systematic reappraisal of this group Schilder (1930) considered that they were not. Currently there are no new published morphological data nor has there been any published re-evaluation of old data. Therefore, the suggestion that the species are 'probably conspecific' (BZN **59**: 173, para. 4) can be seen as nothing more than that. If Pacaud & Dolin are unsure then clearly their proposal is premature. I noted that Schilder's work was the most complete on this group. Pacaud (BZN **61**: 41, para. 3) has interpreted this to mean that I considered it to be 'the best work' and then goes

on to criticise it at some length. I have no opinion on the usefulness of Schilder's taxa. It is true that many are based on internal moulds lacking discrete characters and I suspect that Pacaud & Dolin may be right in regarding many of these nominal taxa as presently being undiagnosable or, more harshly, to be based on 'useless internal moulds'. Unfortunately much of the fossil record consists of specimens in this state of preservation. What do we do with it? Simply ignore it?

Despite the unwieldy systematics, Schilder's work is still the most complete treatment of the group. I certainly look forward to this group being thoroughly systematically re-evaluated. Without doubt it is required.

But what characters should be used? Pacaud (BZN 61: 41, para. 5) stated that the features developed in the callus may be variable in *gisortiana* and 'cannot be regarded as discriminant characters'. The obvious questions are: what characters, at what hierarchical levels and in which taxa? Pacaud makes no comment on this point, but curiously, in discussing a now non-existent specimen, he earlier (BZN 61: 40, para. 1) stated that 'this specimen possessed a large callosity on the dorsal face that differed from the type of *G. coombii*. This feature makes *G. coombii* closer to *G. gisortiana* than *G. tuberculosa*'. It appears that callosities (large bumps developed in the callus) do have systematic value in some cases.

Pacaud (BZN 61: 41, para. 5) responded to my suggestion that morphometric data might be the key to unravelling the systematics of this group, which, he admits, has strongly variable 'qualitative characters'. Unfortunately he provided a height/diameter plot purporting to demonstrate that: 1) *tuberculosa* and *gisortiana* are distinct and 2) that the holotype of *coombii* is closest to *gisortiana*. History has repeatedly shown that overly simplistic biometric plots of skeletal variables such as height/width have cast more shadow than light in molluscan systematics. Too often they have been adduced in support of shaky systematic treatments. Briefly, there are significant problems with this plot: 1) The 'species' height and diameter variables barely overlap; on this basis one might interpret *gisortiana* as larger specimens of *tuberculosa* displaying allometric growth, particularly as we know nothing about the relative ontogenetic ages of the specimens. 2) Crucially, both height and diameter measurements include the variably developed 'callosities'. This is perfectly illustrated by Pacaud & Dolin (BZN 59, p. 175, figs. 1, 2). 3) A recently discovered, undistorted, small specimen (l = 94 mm, d = 72 mm) of *coombii* from the type locality falls right within the main *tuberculosa* cluster, as one might expect from the regression line of the latter. Another specimen (BMNH 41604: l = ca 150mm d = ca 95 mm) would seem to plot indistinguishably from *tuberculosa*. 4) Other large specimens of *coombii* in The Natural History Museum, London, (e.g. BMNH 4604) show a wide range of proportions. In light of the above objections, I have chosen not to redraft Pacaud's plot with additional data points as I believe it to be systematically meaningless.

In short, there is a place for detailed treatment and discussion of morphology and systematics—a systematic paper in a systematic journal. Pacaud's reply fails to satisfy either demand.

With respect to nomenclature let us consider that future work will have adequately demonstrated that the two nominal species are synonymous. If so, then will use of the older name upset stability? I contend that it will not. Of the 25 references provided in support of this proposal by Pacaud & Dolin many are simply listings in illustrated or unillustrated taxonomic compendia. Indeed, the three most recently published

figures are in lavishly illustrated books dealing with Recent cowries and provided seemingly for their curiosity value. As Pacaud (BZN 61: 40–41, para. 2) has confirmed, specimens of this strange, morphologically and systematically poorly known cowry are rare both in France and England. This is important given the current very poor understanding of this genus and lack of recent work dealing with it. Therefore, priority should be maintained in this case. Indeed, it is likely that applications such as this, if upheld, will serve to diminish the Principle of Priority and might lead to petty arguments over the relative frequency of use of competing names in the literature. This is not what any of us, least of all the Commission, should usefully spend time evaluating.

It follows, therefore, that to give precedence to the junior name would be premature and for that reason I recommend that the Commission should not approve the proposals in BZN 59: 174.

Comment on the proposed conservation of *Melania curvicostata* Reeve, 1861 and *Goniobasis paupercula* Lea, 1862 (Mollusca, Gastropoda) by designation of a neotype for *M. curvicostata*
(Case 3232; see BZN 60: 109–112, 300–302)

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In addition to my earlier comment (BZN 60: 302), the contents of the original publications of *Melania curvicostata* Reeve, 1861 and of *Melania densicostata* Reeve, 1861 require a discussion.

1. In their application in 2003 (BZN 60: 109–112) Thompson & Mihalcik state: ‘the original figures and descriptions of both nominal taxa are virtually identical’. Contrary to this statement, the original text contains eight differences between the two species. The original descriptions (complete, but not necessarily in original order) are quoted here:

Melania curvicostata: shell ovately turreted, livid-olive, encircled towards the apex with a reddish line; whorls convex, longitudinally plicately ribbed, ribs curved, gradually fading towards the aperture; aperture ovate, slightly effused at the base interior tinged with purple.

Melania densicostata: shell subulately turreted, burnt-olive; whorls eight to nine, rather flat, the last obtusely angled; longitudinally densely plicately ribbed; ribs stout and comparatively straight ending abruptly on an obtuse angle of the last whorl; aperture rather small, ovate, interior very faintly tinged with purple.

The original figures show, very clearly, *Melania curvicostata* Reeve with curved ribs and convex whorls, and *M. densicostata* with more closely spaced straight ribs, flat whorls and a subangular periphery of the last whorl, just as the two syntypes figured by Thompson & Mihalcik. The applicants attribute these two syntypes to two different species, which supports Reeve’s original taxonomic judgement, contrary to long-held views in the subsequent literature.

2. The original illustration of *Melania curvicostata* Reeve is not significantly different from the syntype figured by Thompson & Mihalcik (BZN 60: 112, fig. 1). It has one more apical whorl preserved, but when this is removed, the height and width are very similar to the figured syntype. Only the relative height of the last whorl is less in the original figure than in the photographed specimen. Making allowances for individual variation and / or perhaps minor inaccuracies in the drawing, there is no reason to suppose that Reeve figured a different species than that represented by the extant syntypes. In any event the figure does not represent the species to which Thompson & Mihalcik want to apply the name *curvicostata* Reeve. Consequently, there is no reason to suspect a 'composite' type series. An important part of the case presented by Thompson & Mihalcik, and of comments (1)–(5) in BZN 60: 300–302, is thus based on the incorrect assumption that the original figure of *Melania curvicostata* Reeve is a species different from the extant syntypes of this nominal species.

3. Thompson & Mihalcik wish to apply the name *Melania curvicostata* Reeve to a species which is not conspecific with the extant syntypes of that species, nor does it agree with the original description and figure. To achieve this, the existing syntypes would have to be set aside and a neotype be designated under the plenary power. The plenary power would have to be invoked further to rule that the name *Melania curvicostata* Reeve, 1861 is not invalidated by its senior primary homonym *Melania curvicostata* Melleville, 1843. This course of possible action is arbitrary in every respect and should be avoided. Instead it is here suggested to apply the name *Melania densicostata* Reeve to the species which Thompson & Mihalcik wish to name *Melania curvicostata*. Although the specific identity of the syntypes of *Melania densicostata* cannot, according to the applicants, be determined unequivocally, their recognizable characters agree with those of '*Melania curvicostata*' sensu Thompson & Mihalcik. Such a situation is not uncommon in the Gastropoda and is usually dealt with by a 'consensual redefinition' of the nominal species in question. If a more formal and definitive fixation of the taxonomic concept is required, the syntype series could be set aside and a neotype be selected. Workers familiar with the species may wish to decide on this question; if a neotype is deemed to be necessary, a complete animal may be preferable to a shell.

4. Thompson & Mihalcik state that the syntypes of *Melania curvicostata* Reeve were sent to Cuming by John G. Anthony with manuscript labels stating their locality as 'Florida, United States'. However, Reeve stated unequivocally that he sent Cuming's material to Anthony: 'this species,' says Mr. Anthony to whom it was sent for examination 'is, I think, entirely new, and a beautiful one it is, too; call it *curvicostata*'. It is not known from where Cuming received his material in the first place, but it is unlikely that Reeve would have sent it back again for examination, had Anthony sent it to Cuming. It follows that Anthony was probably not responsible for an erroneous locality attributed to this species.

5. *Melania curvicostata* Reeve, 1861 is a junior primary homonym of *Melania curvicostata* Melleville, 1843 (p. 94, pl. 4, figs. 10–12). *Melania curvicostata* Melleville has been considered as a species in *Faunus* (*Melanatria*) by Cossmann (1909, p. 161), and Cossmann & Pissarro (1910, pl. 19, figs. 117–118); and as a species in *Melanatria* by Wenz (1929, p. 2620), Le Renard & Pacaud (1995, p. 102) and Pacaud & Le Renard (1996, p. 156). Deshayes (1862, p. 453, 1864, pl. 23, figs. 33–35) redescribed

the species as *Melania curvicostata* without any reference to Melleville, 1843, and attributed authorship to himself. His taxonomic concept and stratum typicum are identical to those of Melleville, 1843. Subsequent workers have attributed the species to Melleville (1843) and correctly treated Deshayes's publication as a redescription of Melleville's species, rather than the introduction of a new nominal species.

6. A modern taxonomic revision of *Melania curvicostata* Melleville, 1843 is still outstanding. The attribution to *Melanatria* Bowdich, 1822 is rather doubtful. Although the two homonymous species are far apart in geography and geological age, it is by no means certain that they cannot be congeneric. The shells are not strikingly different, and there are many examples of faunal relationships in non-marine mollusks in the Tertiary of Europe and North America. Thus application to the Commission for a ruling under the plenary power on the priority of primary homonyms not considered congeneric after 1899 (Article 23.9.5) appears premature in this case.

7. The applicants and the commentators have expressed a preference to maintain the name *Goniobasis paupercula* Lea, 1862 instead of *Melania curvicostata* Reeve, 1861. This can be achieved simply by rejecting *Melania curvicostata* Reeve, 1861 as a junior primary homonym of *M. curvicostata* Melleville. A consequence is that the species called *Melania curvicostata* Reeve by Thompson & Mihalcik has to be given another name, and it is here proposed to apply the name *Melania densicostata* Reeve, 1861 to that species. I therefore submit the following alternative proposals to the Commission in place of those submitted by Thompson & Mihalcik.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *curvicostata* Melleville, 1843, as published in the binomen *Melania curvicostata*;
 - (b) *densicostata* Reeve, 1861, as published in the binomen *Melania densicostata*;
 - (c) *paupercula* Lea, 1862, as published in the binomen *Goniobasis paupercula*;
- (2) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *curvicostata* Reeve, 1861, as published in the binomen *Melania curvicostata*, (a junior primary homonym of *Melania curvicostata* Melleville, 1843, and a senior subjective synonym of *Goniobasis paupercula* Lea, 1862).

Additional references

- Cossmann, M. 1909. *Essais de paléoconchologie comparée*, 8. 248 pp., 4 pls. Cossmann, Paris.
- Cossmann, M. & Pissarro, G. 1910. *Iconographie complète des coquilles fossiles de l'Éocène des environs de Paris*, 2. Pls. 10–25. Paris.
- Deshayes, G.P. 1862. *Description des animaux sans vertèbres découverts dans le bassin de Paris* . . . , 2. Pp. 433–640; 1864, Atlas with 64 pls. Paris.
- Le Renard, J. & Pacaud, J.-M. 1995. Révision des mollusques Paléogènes du bassin de Paris II—Liste des références primaires des espèces. *Cossmanniana*, 3(3): 65–132.
- Pacaud, J.-M. & Le Renard, J. 1996. Révision des mollusques Paléogènes du bassin de Paris IV—Liste systématique actualisée. *Cossmanniana*, 3(4): 151–187.

Comments on the proposed precedence of *Nahecaris* Jaekel, 1921 (Malacostraca, Phyllocarida, Archaeostraca) over *Dilophaspis* Traquair in Walther, 1903 (Case 3281; see BZN 60: 269–271)

The following persons (1–6) have sent comments in support of the proposed precedence of *Nahecaris* Jaekel, 1921 over *Dilophaspis* Traquair in Walther, 1903. *Nahecaris* is based on one of the best known species of middle Palaeozoic crustaceans and it has been widely used since 1921. They all agree that the name is so well-known that confusion would ensue if the arguments of Hahn (1990) and Brauckmann et al. (2002) are followed. Briggs & Bartels provide a clear case for conservation of the name *Nahecaris*.

(1) Jan Bergström

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(2) David L. Bruton

University of Oslo, Norway

(3) Herbert Lutz

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(4) David J. Siveter

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(5) Derek J. Siveter

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(6) Jean Vannier

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(7) R.J. Aldridge

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Given that *Nahecaris* has been widely used since 1921, and that the nature of the original partial specimen of *Dilophaspis* as an arthropod, rather than a fish, was not

confirmed until 1990, I consider that there are strong reasons for retaining the well-known name *Nahecaris*.

(8) Bruce S. Lieberman

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120 Lindley Hall, Lawrence, KS 66045, U.S.A.*

I support Briggs & Bartels's application and their arguments and hope that the Commission will approve their proposals. In particular, I believe that the use of *Dilophaspis* over *Nahecaris* would cause considerable taxonomic confusion. *Nahecaris* is probably the best and most completely known fossil phyllocarid. I have worked with fossil phyllocarid crustaceans and in the course of this work I have dealt with the definition of the genus *Nahecaris* (Rode & Lieberman, 2002). Based on Briggs & Bartels's suggestions I think it would make perfect sense to give *Nahecaris* precedence over *Dilophaspis*. This would considerably aid and facilitate my taxonomic work with this group, and also likely that of my colleagues.

Additional reference

Rode, A. & Lieberman, B.S. 2002. Phylogenetic and biogeographic analysis of Devonian phyllocarid crustaceans. *Journal of Paleontology*, **76**: 271–286.

Comment on the proposed conservation of usage of the specific names of *Libellula aenea* Linnaeus, 1758 (currently *Cordulia aenea*) and *L. flavomaculata* Vander Linden, 1825 (currently *Somatochlora flavomaculata*; Insecta, Odonata) by the replacement of the lectotype of *L. aenea* with a newly designated lectotype (Case 3253; see BZN **60: 272–274)**

Klaas-Douwe B. Dijkstra

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I fully support the conservation of usage of the name *Cordulia aenea* (Linnaeus, 1758) which is crucial for me as editor of a forthcoming field guide to the Western Palaearctic dragonflies, illustrated by the well known natural history illustrator Richard Lewington. Such publications stimulate public interest and rely heavily on the stability of names.

Comments on the proposed precedence of *Bolboceras* Kirby, 1819 (July) (Insecta, Coleoptera) over *Odonteus* Samouelle, 1819 (June)

(Case 3097; see BZN **59**: 246–248, 280–281, **60**: 303–311, **61**: 43–45)

(1) Frank-Thorsten Krell

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Alberto Ballerio

*clo Museo Civico di Scienze Naturali "E. Caffi", Piazza Cittadella 10,
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The reply from Jameson & Howden (BZN 61: 43–45) to our comment on the proposed precedence of *Bolboceras* Kirby, 1819 (July) over *Odonteus* Samouelle, 1819 (June) contains several crucial errors which we would like to rectify.

Jameson & Howden claimed that *Bolboceras* Kirby is the name in prevailing use. This is only true for North America. In Europe, as we have shown (BZN 60: 303–311), *Odonteus* is in prevailing use. In fact, we have two geographically limited prevailing usages, a case not dealt with in Articles 80 and 82.1 of the Code. Contrary to Jameson & Howden's claim, all references for *Odonteus* Samouelle provided by us (BZN 60: 304) have to be considered for determining the prevailing usage, because the present case falls under Article 23.9.3 and not under Article 23.9.1. According to Article 23.9.6, the stated categories of publications which are irrelevant for determining the prevailing usage relate only to Article 23.9.1.

The publications listed by us (BZN 60: 303–311), as references for the prevailing usage of *Odonteus* Samouelle, do not fall within the categories mentioned by Article 23.9.6 anyway, none of them is either an abstracting publication, a nomenclator, an index or a list of names. All are genuine scientific publications providing specific information about the distribution or conservation status of *Odonteus armiger* (Scopoli). Jameson & Howden were probably misled by the category 'list of names', which means a list of scientific names without further information beyond the names (like a nomenclator or an index), and not 'Red Lists' or annotated checklists. If we want to determine the overall prevailing usage by sheer numbers of authors and publications, *Odonteus* Samouelle is unequivocally the prevailing usage (and the senior synonym) which has to be maintained until the ruling of the Commission is published (Article 82.1). Following this course of action, Jameson (2002, pp. 23–25) was in breach of Article 82.1 by using *Bolboceras*. As Ratcliffe correctly stated (BZN 61: 43) the monograph in which Jameson's (2002) paper was included will serve as reference for nomenclature and classification of North American beetles, but, as mentioned previously (BZN 60: 304), so do the European standard works (that use *Odonteus*) for nomenclature and classification of European beetles (e.g. Krell & Fery, 1992; Silfverberg, 1992; Carpaneto & Piattella, 1995; Alexandrovitch et al., 1996; Hansen, 1996; Telnov et al., 1997; Köhler & Klausnitzer, 1998; Martín-Piera & Lopez-Colón, 2000). Since, in Europe at least, *Odonteus* is the prevailing usage, the references published after the announcement of the present case in December 1998 documenting the usage of *Odonteus* should also be considered. We here add two further papers of world-wide scope in which the authors followed (the latter explicitly) our argument in BZN 60: 303–311 (Grebennikov et al., 2004; Verdú et al., 2004).

Jameson & Howden (BZN 61: 43–45) are right that *Bolboceras* has been in continuous use since its description. However, *Bolboceras* was rarely considered to

be the valid name for *Odonteus* before Cartwright (1953) transferred the name *Bolboceras* to the genus formerly known as *Odontaeus* Dejean, 1821 (an incorrect subsequent spelling of *Odonteus*) (see BZN 60: 304–305). The names *Bolboceras* and *Odontaeus* have mostly been used for different genera (Klug, 1845, p. 37; Horn, 1870, pp. 49–50; Reitter, 1893, pp. 4–5; Schaeffer, 1906, p. 250; Boucomont, 1912, p. 7 [*Bolboceras*], p. 15 [*Odontaeus*]; Paulian, 1988, pp. 157, 541, 544 [*Odontaeus*], 490, 582 [*Bolboceras*]) sometimes explicitly with reference to *Bolboceras quadridens* Fabricius, 1781 as the type species of *Bolboceras* (Westwood, 1855; Boucomont, 1911). We proposed (BZN 60: 307) to conserve the name *Bolboceras* in this sense.

We consider *Odontaeus* Dejean, 1821 to be an incorrect subsequent spelling of *Odonteus* Samouelle, 1819 because in the early 1800s, before any nomenclatural rules were established, authors were not generally attributed to names according to the Principle of Priority, but according to other criteria such as reputation of an author, importance of a monograph, usage, tradition, personal preferences and relationships. Many names had circulated widely *in litteris* amongst the authors of the time before they were published occasionally at some point by someone or, as happened here, by several authors. *Odonteus* and *Odontaeus* refer to the same species. As we said before, giving the same name to a genus containing the same species is unlikely to be sheer coincidence. Samouelle (1819) did not include as many species as were in Dejean's (1821) catalogue because the geographical scope of the former is restricted to Britain where only one species (*Odonteus armiger*) occurs. Hence, we have no indication that the taxonomic concept behind *Odonteus* Samouelle differs from that of *Odontaeus* Dejean. Jameson & Howden's belief that 'if these names were the same, then the authors would have attributed the name to the same individual' does not take into consideration how nomenclature and authorship were handled at that time and is wrong.

The replacement of *Odonteus* Agassiz, 1838 by *Odontebolca* Krell, 1991, has been accepted in the relevant literature (Bellwood & Sorbini, 1996, p. 161; Bellwood, 1999, p. 211) and, contrary to Jameson & Howden's belief, no confusion has emerged from this replacement.

If the Commission designates *Scarabaeus quadridens* as the type species of *Bolboceras*, we will be able to refer to *Bolboceras* Kirby, 1819 as the type genus of BOLBOCERATINI and BOLBOCERATINAE. This outcome is also favoured by Ratcliffe in his comment on the present case (BZN 61: 43). If we were to accept Curtis's type species designation (*Bolboceras mobilicornis* Marsham, 1802 = *armiger* Scopoli, 1772), then either *Bolboceras* disappears as a valid name, as a junior objective synonym of *Odonteus* Samouelle, or the name *Bolboceras* would take precedence over *Odonteus* Samouelle disregarding the prevailing usage in Europe. If the Commission considers the latter solution, we would like to ask for an explanation as to why the prevailing usage in Europe (which is in accordance with the Code) should be disregarded in preference for the prevailing usage in North America (which does not follow the Principle of Priority).

Additional references

- Bellwood, D.R. 1999. Fossil pharyngognath fishes from Monte Bolca, Italy, with a description of a new pomacentrid genus and species. *Studi e Ricerche sui Giacimenti Terziari di Bolca*, 8: 207–217.

- Bellwood, D.R. & Sorbini, L.** 1996. A review of the fossil record of the Pomacentridae (Teleostei: Labroidae) with a description of a new genus and species from the Eocene of Monte Bolca, Italy. *Zoological Journal of the Linnean Society of London*, **117**: 159–174.
- Boucmon, A.** 1912. Scarabaeidae: Taurocerastinae, Geotrupinae. *Coleopterorum Catalogus*, **46**, vol. 19. 47 pp. Berlin.
- Grebennikov, V.V., Ballerio, A., Ocampo, F.C. & Scholtz, C.H.** 2004 (in press). Larvae of Ceratocanthidae and Hybosoridae (Coleoptera: Scarabaeoidea): study of morphology, phylogenetic analysis and evidence of paraphyly of Hybosoridae. *Systematic Entomology*, **29**.
- Paulian, R.** 1988. *Biologie des Coléoptères*. xi, 719 pp. Lechevalier, Paris.
- Verdú, J.R., Galante, E., Lumaret, J.-P. & Cabrero-Sañudo, F.J.** 2004 (in press). Phylogenetic analysis of Geotrupidae (Coleoptera, Scarabaeoidea) based on larvae. *Systematic Entomology*, **29**.

(2) Andrew B.T. Smith

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I support the application to give *Bolboceras* Kirby, 1819 (July) precedence over *Odonteus* Samouelle, 1819 (June). This action is necessary to preserve the prevailing usage of the former generic name for the North American species *Bolboceras alabamensis* (Wallis, 1929), *B. cornigerus* Melsheimer, 1846, *B. darlingtoni* (Wallis, 1928), *B. falli* (Wallis, 1928), *B. filicornis* (Say, 1823), *B. floridensis* (Wallis, 1928), *B. liebecki* (Wallis, 1928), *B. obesus* (LeConte, 1859), *B. simi* (Wallis, 1928), and *B. thoracicornis* (Wallis, 1928). These species have been universally placed in the genus *Bolboceras* for over 50 years. *B. armiger* (Scopoli, 1772), the one remaining species in the genus, has been placed in *Bolboceras*, *Odonteus*, and *Odontaeus* Dejean, 1821 by various authors during the same time period. I assert that the generic placement of *B. armiger* has been so contradictory that no prevailing usage can be discerned for any of these generic names with regard to this species. The Code promotes the stability and prevailing usage of names (for example, see Articles 23.2, 81.1, and Appendix B-1 of the Code). *B. armiger* is already a nomenclatural mess; the same problems should not be inflicted on the other ten species in the genus by invalidating a generic name with a 50-year tradition of use.

The following discrepancies regarding this case have caused confusion and inconsistencies in the use of generic names within the group. Explicit clarification of each of the following points should be made by the Commission in their ruling on this case to stabilize the use of names in this group:

1. Jameson & Howden (BZN 59: 247) stated that the gender of *Bolboceras* is masculine; however, Article 30.1.2 (and especially the example following this Article) clearly indicates that the gender should be neuter. The name ends in a Greek word transliterated into Latin without other changes (-ceras = keras). An explicit statement from the Commission regarding the gender of *Bolboceras* is required in their ruling on this case and possibly emendations of some of the species names is desirable to clear up this discrepancy.

2. Krell et al. (BZN 60: 304) discuss the use of *Odonteus* and *Odontaeus* and state that these names are 'in fact' the same and one is an incorrect subsequent spelling of the other. However, *Odonteus* Samouelle was originally attributed to Köppe (perhaps by Leach through letters or personal communication) and *Odontaeus* Dejean was originally attributed to Megerle. Samouelle and Dejean apparently established the

names independently of one another with different spellings and each attributed the names to different sources. There is no evidence that Dejean was using the name earlier established by Samouelle but with an incorrect subsequent spelling. In the absence of any internal evidence, I think that Jameson & Howden (BZN 59: 246) are correct in exercising caution and considering *Odonteus* and *Odontaeus* as separate generic names. Clarification from the Commission on the nomenclatural status of *Odontaeus* Dejean is desirable.

Krell et al. (BZN 60: 305) also discuss the type species of *Bolboceras*. I disagree with their interpretation of Kirby's statement 'my details of *Bolboceras* were taken from *B. quadridens*' as an explicit type species designation. This statement is vague and I suspect it just refers to the use of *B. quadridens* for the illustrations of the genus. It certainly fails to fulfil the requirements of Articles 67.5 and 68.2 for type species designations. Curtis's explicit type species designation of *Scarabaeus mobilicornis* Fabricius for *Bolboceras* should stand. However, this should be clarified by the Commission in its ruling on the case.

Comment on the proposed conservation of the specific name of *Macropodus concolor* Ahl, 1937 (Osteichthyes, OSPHRONEMIDAE)
(Case 3255; see BZN 60: 206–207)

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When reading the application by Schindler & Staeck we cannot but wonder as to its true aim. In our opinion the application is flawed and partially incorrect. We therefore see no reason for supporting it, rather than simply respecting the Principle of Priority.

It appears to have escaped the petitioners' attention that *Macropodus concolor* Ahl, 1937 is a permanently invalid name. It is a junior primary homonym of *M. concolor* Schreitmüller, 1936b (a work mentioned by the petitioners).

Schreitmüller's (1936b) text makes it clear that although Ahl had coined the name, Ahl was not otherwise responsible for the conditions making it available. Schreitmüller alone is responsible for satisfying the criteria of availability (Article 50.1.1 of the Code). The name is clearly an unneeded replacement name for

M. spechti Schreitmüller, 1936 to which there is an explicit bibliographic reference (Article 13.1.3); both actions are explicitly by Schreitmüller. There are neither descriptive data nor any indication that Ahl had any responsibility for Schreitmüller's text. The figure (reproduced from Schreitmüller, 1936a) is by Schreitmüller, as indicated by his signature and in the heading of the paper. *Macropodus opercularis spechti* Schreitmüller, 1936a was published in October 1936, *M. o. concolor* Schreitmüller, 1936b was published on 12 November 1936, *M. o. concolor* Ahl, 1937 was submitted on 8 October 1936 and published in February 1937.

The use of *M. concolor* as a replacement name by Schreitmüller (1936b) makes it available with Schreitmüller as author (= responsible for the conditions making the name available; Article 50.1). This makes *M. concolor* Ahl, 1937 (described with its own series of syntypes) a primary junior homonym of *M. concolor* Schreitmüller, 1936b (thus permanently invalid; Article 57.2) and a junior objective synonym of *M. spechti* (the lectotype of *M. concolor* Ahl is also the lectotype of *M. spechti*). In conclusion, the petitioners ask for the conservation of a name that anyway would remain invalid because of the homonymy, and we consider that, *ipso facto*, the request is null and void.

Just as with *Macropodus spechti*, *M. concolor* Ahl, 1937 was based on aquarium material stated to have been collected in the Dutch East Indies, apparently erroneous information as the genus has never been found there. This has stimulated a number of speculations and theories as to its origin, which certain authors have considered to be a hybrid or domesticated variety. These speculations have neither an empirical nor a scientific basis. It is only very recently that the species was 'rediscovered' in the wild.

The description by Freyhof & Herder (2002) is the first and only description of the species satisfying modern standards in fish taxonomy, addressing the nomenclatural issues and accompanied by accurate locality data, information on morphology and coloration based on wild specimens, habitat data, and colour photographs of the live fish and its habitat. In addition, Freyhof & Herder (2002) discussed the other species of the genus and described two new species also overlooked by previous authors.

Given this, in addition to respecting priority, the use of *Macropodus spechti* has the great advantage of drawing a line between the speculations associated with the name *M. concolor* and the reliable data which we now have under the name *M. spechti*.

The petitioners err when they state (p. 207, line 6) that 'the senior name was effectively forgotten'. The senior name may not have been used as valid, but it was not forgotten. It is cited in some of the 28 works on the list submitted to the Secretariat by the petitioners themselves, either as an historical matter or as a synonym. The fact that these authors did not use the senior name may simply mean that they were unaware of some of the details of the Code.

The petitioners comment further that Schreitmüller (1936b) himself proposed giving priority to *Macropodus concolor* Ahl. As discussed above, it is only relevant to demonstrate that Schreitmüller's action was deliberate. No provision of the Code allowed Schreitmüller (1936b) to 'give priority' to a name that did not exist before and, technically, his action simply is the creation of an unneeded replacement name (Article 13.1.3). Schreitmüller was apparently careless about using unpublished data of others, but this is irrelevant as far as nomenclature is concerned.

Some of the claims of the petitioners are unsupported. The names of fish species commonly kept in aquaria appear in hundreds of publications, scientific as well as popular. By contrast, publications using the name *Macropodus concolor* are very few (28 listed by the petitioners is an insignificant number), indicating that the species is of marginal concern to aquarists. It is unavailable commercially, is kept only by a few individuals dedicated to a small group of species, and was virtually unknown to science until the appearance of Freyhof & Herder (2002). This is further evidenced by the list of 28 publications which includes seven papers published in aquarium magazines (some in obscure closed society journals almost impossible to find through normal library channels; e.g. *Der Makropode*) and 10 books on aquarium fishes reporting on any species once kept in aquaria (these would use any name, albeit only for adding entries; for most, the authors only repeated earlier compilations). Out of the 11 remaining titles listed by the petitioners, four are lists, type catalogues and biographies (among them, citation of Eschmeyer, 1998, is misleading as both *M. concolor* and *M. spechti* are listed, and *M. spechti* is not listed as a synonym; furthermore, the current on-line version records *M. spechti* as a valid name and *M. concolor* as its synonym: <http://www.calacademy.org/research/ichthyology/catalog/fishcatsearch.html>, as does FishBase www.fishbase.org) and seven can be termed scientific literature (or close to). The petitioners' list includes a paper by Herder & Freyhof in an aquarium magazine, which appears to be an inappropriate listing. Responsibly, Herder & Freyhof considered that their nomenclatural conclusions had first to be published in the scientific literature. We have checked only part of the 28 listed works, but the two patent cases mentioned above suggest that the list be taken with due reservation.

Macropodus spechti is not a well-known species for which the replacement of a junior synonym by the senior name would create a problem for anybody. Nomenclatural changes are reported quickly in the aquarium literature, and within a few months journals and web sites have adjusted. How is it possible that the change of a name of an inappropriately described fish, known only in a restricted circle, could affect the users of zoological nomenclature, while the change of both the generic and specific names of the rainbow trout from *Salmo gairdneri* to *Oncorhynchus mykiss* created no problem? *Oncorhynchus mykiss* is cited each year in thousands of scientific, technical, commercial and popular publications, is mentioned in national and international legal instruments, and is the object of a trade worth billions of dollars annually. How does this compare to the *M. spechti* case?

While there are many nomenclatural problems involving complex cases, well-known names, etc. waiting for rulings by the Commission, we find it the utmost shame to abuse the time of Commissioners with such an insignificant case. If the Commission has to be invoked for every case of synonymy involving pets, we have potentially hundreds of similar cases, enough to keep us busy for years writing applications and the Commission for years voting on the duller possible cases, obstructing the way to much more significant cases. Nomenclature has purposes and impacts which certainly are beyond taxonomy and academic science. But nomenclature certainly does not have among its purposes the serving of vested interests. A good code is a code allowing the fewest possible exceptions.

For all the above reasons, we recommend the Commission to reject the application.

Comments on the proposed conservation of usage of the specific name of *Palaeortyx phasianoides* Milne-Edwards, 1869 (Aves, Galliformes) by the designation of a neotype
(Case 3266; see BZN 60: 211–214)

(1) Evgeny N. Kurochkin

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I strongly support the proposal to fix the name *Palaeortyx phasianoides* Milne-Edwards, 1869 by the designation of a neotype (scapula no. MNHN Av 2895) and placing the name *P. phasianoides* on the Official List. The argument for conservation of the specific name was well-presented by Göhlich & Mourer-Chauviré.

(2) Marco Pavia

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I support the proposals to conserve the usage of the specific name of *Palaeortyx phasianoides* and, in particular, the designation of the scapula (one of the syntypes) from Saint-Gérard-le-Puy (MNHN Av 2895) as the neotype of *P. phasianoides* and the placement of the name *P. phasianoides* on the Official List. I analysed the arguments presented in the application and I agree with all the points stated by Göhlich and Mourer-Chauviré. In a recent revision of the Cenozoic birds of the world, Mlíkovský (2002) recognized the syntype scapula (MNHN Av 2895), previously left indeterminate (Mlíkovský, 2000), as a 'paralectotype' of *P. phasianoides* and identified both the humerus and the scapula with the anatid *Mionetta blanchardi*. Although the scapula is well-preserved it clearly shows the morphological characteristics of the galliforms, particularly the PHASIANIDAE, as also stated by Ballmann (1969b). I also agree with the reasons explained by the applicants further demonstrating the confusion caused by Mlíkovský in his analysis of the *P. phasianoides* material.

Additional references

Mlíkovský, J. 2002. *Cenozoic birds of the World. Part 1: Europe*. 406 pp. Ninox Press, Praha.

(3) Jiří Mlíkovský

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In opposition to the application I submit the following observations:

1. Alphonse Milne-Edwards (1869, p. 237) described *Palaeortyx phasianoides* on the basis of two syntypes: the shaft of a humerus, and proximal end of a scapula, both of which are housed in the Muséum National d'Histoire Naturelle in Paris, France. These syntypes belong to two different species (Ballmann 1969a, b; Mlíkovský, 2000;

Göhlich & Mourer-Chauviré, BZN 60: 212). Mlíkovský (2000, p. 93) as the first reviser, selected the more diagnostic humerus shaft (MNHN Av-2896) as the lectotype of the species, and subsequently synonymised it with *Anas* (= *Mionetta*) *blanchardi* Milne-Edwards, 1863, an abundantly found duck described from the same locality.

2. Göhlich & Mourer-Chauviré (BZN 60: 213) suggested that the lectotype humerus shaft is identical with the same bone of *Ameripodius alexis* Mourer-Chauviré, 2000, although Mourer-Chauviré (2000, p. 481), while describing this species, concluded that this is not the case. On the basis of their unsupported observation, Göhlich & Mourer-Chauviré (BZN 60: 213) suggested that the designation of the humerus fragment MNHN Av-2896 as the lectotype of *Palaeortyx phasianoides* Milne-Edwards, 1869 would cause 'considerable disruption and confusion affecting the involved species *Palaeortyx phasianoides*, *Mionetta blanchardi* and *Ameripodius alexis*', and that this problem could be avoided by designating the paralectotype scapula fragment MNHN Av-2895 as the neotype of *Palaeortyx phasianoides* Milne-Edwards, 1869. I argue that their proposals are invalid.

3. The name *Anas* (= *Mionetta*) *blanchardi* Milne-Edwards, 1863 is not affected, irrespective of the taxonomic identity of the lectotype humerus shaft. If it belongs to *Mionetta blanchardi*, then *Palaeortyx phasianoides* falls into the synonymy of the latter species as suggested by Mlíkovský (2000, p. 481). If the lectotype represents a member of the family PHASIANIDAE (as suggested by Mourer-Chauviré, 2000, p. 481) or of the family QUERCYMEGAPODIIDAE (as suggested by Göhlich & Mourer-Chauviré, BZN 60: 213), then the name *Mionetta blanchardi* is also not affected.

4. The name *Ameripodius alexis* Mourer-Chauviré, 2000 is not affected if the lectotype humerus fragment belongs to *Mionetta blanchardi* (as suggested by Mlíkovský, 2000). If Göhlich & Mourer-Chauviré (BZN 60: 213) are correct in the taxonomic treatment of this humerus, then *Ameripodius alexis* Mourer-Chauviré, 2000 will fall in the synonymy of *Palaeortyx phasianoides* Milne-Edwards, 1869. *Ameripodius alexis* is a newly described species, so its synonymy will not cause any nomenclatural disturbance.

5. The name *Palaeortyx phasianoides* Milne-Edwards, 1869 is a junior synonym of *Mionetta blanchardi* according to Mlíkovský (2000). However, if the lectotype belongs to *Ameripodius alexis*, as suggested by Göhlich & Mourer-Chauviré (BZN 60: 213), then the name *P. phasianoides* will be used as a valid name for a galliform bird, larger than other *Palaeortyx* species, as intended by Milne-Edwards (1869). Milne-Edwards (1869, p. 237) himself doubted the inclusion of *phasianoides* in the genus *Palaeortyx*, because he described it with a question mark (*Palaeortyx?* *phasianoides*). Thus, if Göhlich & Mourer-Chauviré (BZN 60: 213) are correct in their taxonomic identification of the lectotype of *Palaeortyx phasianoides*, then the name is saved by this taxonomic action and no action by the Commission is necessary.

6. Göhlich & Mourer-Chauviré (BZN 60: 213) proposed that the proximal end of a scapula is designated as the neotype for *Palaeortyx phasianoides* Milne-Edwards, 1869. This bone is less diagnostic in birds and should never be used as a type for an avian species. Within the Galliformes the scapulae often cannot be identified at the generic level (J. Mlíkovský, unpublished results). Thus, if a partial scapula is designated as a neotype of a galliform species, then the respective name will probably

be forever relegated to the category of Galliformes incertae sedis. Moreover, Göhlich & Mourer-Chauviré did not even try to identify the scapula fragment MNHN Av-2895, which they proposed as a neotype for *Palaeortyx phasianoides* (family PHASIANIDAE).

7. Göhlich & Mourer-Chauviré (BZN 60: 212) tried to show that *Palaeortyx phasianoides* is a 'universally accepted and much used' name and cited 11 references in support of this suggestion. However, subsequent to its description, the specific name *phasianoides* was applied to fossil birds only twice: to Middle Miocene quails of Grive-Saint-Alban in France (Ballmann, 1969a), and to Early Miocene quails from Wintershof-West in Germany (Ballmann, 1969b). In addition, the name was tentatively applied to Early Miocene quails from Dolnice in Czechia (Švec, 1980) and to late Miocene quails of Rudabánya in Hungary (Jánossy, 1993). All other publications cited by Göhlich & Mourer-Chauviré (BZN 60: 212) in this respect are either catalogues (Lydekker, 1891; Lambrecht, 1933; Brodkorb, 1967; Bocheski, 1997) or the name has been merely mentioned in other palaeontological literature (Gaillard, 1908; Cheneval, 2000; Mourer-Chauviré, 2000). Göhlich & Mourer-Chauviré also overlooked the fact that *Palaeortyx longipes* Milne-Edwards, 1869 and *Palaeocryptonyx gaillardi* Ennouchi, 1930 have been applied to this species (Mlíkovský, 2002, pp. 154–155). If the scapula fragment MNHN Av-2895 is designated as the neotype of *Palaeortyx phasianoides*, and even if it is identified as the species under discussion, as believed by Göhlich & Mourer-Chauviré, then *Palaeortyx phasianoides* Milne-Edwards, 1869 would compete with *Palaeocryptonyx longipes* Milne-Edwards, 1869 for priority. Because both these names were published in the same livraison of the same book, the selection of the valid name for the given taxon depends on the decision of the first reviser (Article 24.2.2). Mlíkovský (2002, p. 154), as first reviser, used the name *P. longipes* as valid therefore *P. phasianoides* would become a subjective junior synonym of *P. longipes*.

8. The Commission is accordingly asked not to approve the proposals by Göhlich & Mourer-Chauviré (BZN 60: 213).

Additional references

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Comment on the proposed conservation of *Viverra maculata* Gray, 1830 (currently *Genetta maculata*; Mammalia, Carnivora)
(Case 3204; see BZN 60: 45–47)

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I oppose the proposal by Gaubert et al. to conserve the specific name of *Genetta maculata* (Gray, 1830) for the species commonly known as the Rusty-spotted Genet.

1. *Genetta maculata* (Gray, 1830) is a nominal species whose identity was not in doubt at the time when the 'neotype' was designated and was not involved in any complex zoological problem. The application did not mention that Gaubert et al. (2003) had designated a neotype for this nominal taxon. Some workers have regarded the name *G. maculata* (Gray, 1830) as a nomen nudum, but it is actually invalid as a junior primary homonym of *V. maculata* Kerr, 1792. Gaubert et al. (2003) did not expressly state that there was an exceptional need for the designation of a neotype. Therefore, according to Article 75.2 of the Code, the purported 'neotype' has no name-bearing status. Additionally, knowing that the nominal taxon was invalid would suggest that there was no 'exceptional need' to designate a neotype (Article 75.3). Prevailing usage seemed to ignore the fact that *G. maculata* (Gray, 1830) was an invalid name.

2. While it is generally agreed that Gray (1864; 1869) and Matschie (1902) mistakenly associated *G. maculata* (Gray, 1830) with *G. genetta* (Linnaeus, 1766), the name *G. maculata* was commonly used as a senior synonym of *G. pardina* I. Geoffroy Saint-Hilaire, 1832, either as a name mistakenly thought to be valid (Schwarz, 1930; Allen, 1939; Kuhn, 1965; Michaelis, 1972; Schlawe, 1980, 1981; Honacki et al., 1982; Meester et al., 1986; Fuller et al., 1990) or as a name recognised as invalid (Coetzee, 1967; 1977; Rosevear, 1974; Ansell, 1978; Grubb et al., 1998). Crawford-Cabral (1969, 1970, '1981' correctly 1982) treated *G. maculata* as a nomen dubium. Gaubert et al. (2002, 2003, BZN 60: 45–47) did not regard *G. maculata* as a synonym of *G. pardina*.

3. The 'neotype' of *G. maculata* is a specimen of the taxon usually known as *G. rubiginosa* Pucheran, 1855, and if its designation were a valid action, the name *G. maculata* would become a senior but invalid synonym of this nominal species. Gaubert et al. (2003, p. 7) stated that 'the designation of the neotype was done in order to clarify the taxonomy of the Large-spotted Genets [a group of species] by fixing a species name in use for the Rusty-spotted Genet . . . and a type locality'. They did not state that the 'neotype' was designated with the express purpose of clarifying the taxonomic status of the nominal species *G. maculata* (Gray, 1830) (Article 75.3.1). Therefore, the 'neotype' was not validly designated under Article 75.3 in addition to the point made in para. 1 above.

4. Gaubert et al. (2003, p. 3) indicated that 'the purpose of the paper was to stabilise the classification within the Large-spotted Genet complex and provide a definitive base for naturalists and field decision-makers'. They further stated (Gaubert et al., 2003, p. 6) that neither *G. fieldiana* Du Chaillu, 1860 nor another more junior synonym should become the valid name for what had usually been termed *G. rubiginosa* because the names 'have never been used for designating populations of the species since the work of Matschie (1902)' and their use 'would be even more confusing for the taxonomy of the Large-spotted Genets'. In fact, *G. fieldiana* has been in use as a subspecific name (Allen, 1924; Schouteden, 1945; Cansdale, 1948; Perret & Aellen, 1956; Crawford-Cabral, 1970) and had been regarded as a synonym of the species that is usually called *G. rubiginosa*. The notion expressed by Gaubert et al. (2003) was that *G. rubiginosa*, if not a valid name for the taxon to which it usually has been applied, should not be replaced by the next available name and that this reasoning was behind their designation of a neotype for *G. maculata*. Gaubert et al. (2003, p. 6) stated that *G. maculata* 'is commonly in use

to designate—partially or strictly—the Rusty-spotted Genet’ (‘partially’, when this invalid name was used to include both *G. pardina* and *G. cf. rubiginosa* in one species, and ‘strictly’ when the authors alone used the name solely for *G. cf. rubiginosa*, a minority usage, as indicated above).

5. The choice of the particular specimen as neotype for *G. maculata* by Gaubert et al. (2003) has created a situation that is not in accord with the prevailing use of this name. In the literature *G. maculata* is widely known as a synonym of *G. pardina*. I would therefore argue that the neotype for *G. maculata* was designated to provide a different name for a taxon widely known as *G. rubiginosa* for which *G. fieldiana* had been suggested to be the valid name (see Crawford-Cabral, 1970). Stability is not maintained by this action because it causes two distinct taxa to appear under the same name, hence failing to ensure that the name of each taxon is unique and distinct, contrary to the Preamble of the Code.

6. Gaubert et al. (2003) noted that the type specimen associated with *G. rubiginosa* had been found to belong to another species that is currently known as *G. thierryi* Matschie, 1902. The name *G. rubiginosa* has been consistently treated as a valid South African taxon, ranked as a subspecies of *G. tigrina* (Schreber, 1777) or *G. pardina*, or regarded as a full species, *G. rubiginosa*, but never as a senior synonym of *G. thierryi*. The holotype of the nominal species *G. rubiginosa* is not in accord with the prevailing usage of the name and stability is threatened thereby. As an alternative to the proposals in BZN 60: 46, I propose, under Article 75.6, that the holotype of *G. rubiginosa* be set aside and the holotype of *G. letabae* Thomas & Schwann, 1906, consisting of the skin and skull of a male specimen (registration number 1905.12.9.15 in the Zoology Department, The Natural History Museum, London), from Klein Letaba, 23°21' S, 30°40' E, in the former northern Transvaal (now Limpopo Province), South Africa, be designated as neotype.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for *Genetta rubiginosa* Pucheran, 1855 and to designate the male specimen in The Natural History Museum, London (registration number 1905.12.9.15) described in para. 6 above as the neotype;
- (2) to place on the Official List of Specific Names in Zoology the name *rubiginosa* Pucheran, 1855, as published in the binomen *Genetta rubiginosa* and as defined by the neotype designated in (1) above;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *maculata* Gray, 1830, as published in the binomen *Viverra maculata* (an invalid junior primary homonym of *V. maculata* Kerr, 1792).

Additional references

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- Schlawe, L.** 1980. Zur geographischen Verbreitung der Ginsterkatzen, Gattung *Genetta* G. Cuvier, 1816 (Mammalia, Carnivora, Viverridae). *Faunistische Abhandlungen Staatliches Museum für Tierkunde in Dresden*, **7**: 147–161.
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OPINION 2073 (Case 3206)***Halcampella* Andres, 1883 (Cnidaria, Anthozoa, Actiniaria):*****H. maxima* Hertwig, 1888 designated as the type species**

Abstract. The Commission has designated *Halcampella maxima* Hertwig, 1888 as the type species of the soft-bottom dwelling genus of sea anemone *Halcampella* Andres, 1883 (family HALCAMPOIDIDAE). The nominal species *Halcampa endromitata* Andres, 1881, type species by monotypy, is set aside as a nomen dubium.

Keywords. Nomenclature; taxonomy; Cnidaria; Anthozoa; Actiniaria; HALCAMPOIDIDAE; *Halcampella*; *Halcampella endromitata*; *Halcampella maxima*; sea anemones.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Halcampella* Andres, 1883 are hereby set aside and *Halcampella maxima* Hertwig, 1888 is designated as the type species.
- (2) The name *Halcampella* Andres, 1883 (gender: feminine), type species by designation in (1) above *Halcampella maxima* Hertwig, 1888, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *maxima* Hertwig, 1888, as published in the binomen *Halcampella maxima* (specific name of the type species of *Halcampella* Andres, 1883), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3206

An application to designate *Halcampella maxima* Hertwig, 1888 as the type species of the sea anemone genus *Halcampella* Andres, 1883 (family HALCAMPOIDIDAE) was received from E. Rodríguez and P.J. López-González (*Universidad de Sevilla, Reina Mercedes, Sevilla, Spain*) on 30 May 2001. After correspondence the case was published in BZN 59: 170–172 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 171. At the close of the voting period on 1 March 2004 the votes were as follows: 22 Commissioners voted FOR the proposals, 1 Commissioner voted AGAINST, Calder and Ng were on leave of absence.

Voting against, Štys commented that no effort to locate the pertinent material or information about its possible fate was given in the application.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Halcampella Andres, 1883, *Atti della Reale Accademia de Lincei, Memorie*, (3)14: 315.

maxima, *Halcampella*, Hertwig, 1888, *Report on the Scientific Results of the Voyage of H.M.S.*

Challenger during the years 1873–76, Zoology, 26: 29.

OPINION 2074 (Case 3213)

***Bothriurus alticola* Pocock, 1899 (Arachnida, Scorpiones): specific name given precedence over the subspecific name of *Cercophonius brachycentrus bivittatus* Thorell, 1877**

Abstract. The Commission has ruled that the specific name of *Bothriurus alticola* Pocock, 1899 for a scorpion (family BOTHRIURIDAE) from Argentina is conserved by giving it precedence over the little used subspecific name *Cercophonius brachycentrus bivittatus* Thorell, 1877.

Keywords. Nomenclature; taxonomy; Arachnida; Scorpiones; BOTHRIURIDAE; *Cercophonius brachycentrus bivittatus*; *Bothriurus alticola*; Argentina.

Ruling

- (1) Under the plenary power it is hereby ruled that the name *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, is given precedence over the name *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, whenever the two are considered to be synonyms.
- (2) The name *Orobothriurus* Maury, 1976 (gender: masculine), type species by original designation *Bothriurus alticola* Pocock, 1899, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, with the endorsement that it is to be given precedence over the name *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, whenever the two are considered to be synonyms;
 - (b) *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, with the endorsement that it is not to be given priority over the name *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, whenever the two are considered to be synonyms.

History of Case 3213

An application to conserve the specific name of *Bothriurus alticola* Pocock, 1899, for a scorpion (family BOTHRIURIDAE) from Argentina, by giving it precedence over the little used subspecific name *Cercophonius brachycentrus bivittatus* Thorell, 1877, was received from Luis E. Acosta (CONICET - Universidad Nacional de Córdoba, Córdoba, Argentina) on 15 July 2001. After correspondence the case was published in BZN 59: 176–179 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 177–178. At the close of the voting period on

1 March 2004 the votes were as follows: 20 Commissioners voted FOR the proposals, 3 Commissioners voted AGAINST, Calder and Ng were on leave of absence.

Voting against, Alonso-Zarazaga commented that the name proposed for conservation is little used, so priority must stand.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

alticola, *Bothriurus*, Pocock, 1899, *The highest Andes, a record of the first ascent of Aconcagua and Tupungato in Argentina, and the exploration of the surrounding valleys*, p. 357.

Orobothriurus Maury, 1976, *Revista Peruana de Entomología*, **18**: 14.

bivittatus, *Cercophonius brachycentrus*, Thorell, 1877, *Atti della Società Italiana di Scienze Naturali*, **19**: 183.

OPINION 2075 (Case 3200)***Gryllus brachypterus* Ocskay, 1826 (currently *Euthystira brachyptera*) and *Gryllus brachypterus* Haan, 1842 (currently *Duolandrevus brachypterus*) (Insecta, Orthoptera): specific names conserved**

Abstract. The Commission has ruled that the specific names of *Gryllus brachypterus* Ocskay, 1826 (currently *Euthystira brachyptera* Caelifera, ACRIDOIDEA) and *G. brachypterus* Haan, 1842 (currently *Duolandrevus brachypterus* Ensifera, GRYLLOIDEA), for two distinct species of grasshopper and cricket respectively (Orthoptera), are not invalid by reason of being junior primary homonyms of *G. brachypterus* Linnaeus, 1761 (currently *Metrioptera brachyptera* Ensifera, TETTIGONIOIDEA) a bush cricket and *G. brachypterus* Linnaeus, 1763 (for which the replacement name *G. (Mantis) necydaloides* Linnaeus, 1763 is a nomen oblitum (currently *Pseudophasma phthisicum* (Linnaeus, 1758)). *Gryllus brachypterus* Haan, 1842 has also been ruled not invalid by reason of being a junior primary homonym of *Gryllus brachypterus* Ocskay, 1826.

Keywords. Nomenclature; taxonomy; Orthoptera; Phasmida; Ensifera; TETTIGONIOIDEA; *Gryllus brachypterus*; GRYLLOIDEA; *Duolandrevus brachypterus*; Caelifera; ACRIDOIDEA; *Euthystira brachyptera*; bush crickets; crickets; grasshoppers; phasmids.

Ruling

- (1) Under the plenary power it is hereby ruled that the following names are not invalid:
 - (a) *brachypterus* Ocskay, 1826, as published in the binomen *Gryllus brachypterus*, by reason of being a junior primary homonym of *Gryllus brachypterus* Linnaeus, 1761 and of *Gryllus brachypterus* Linnaeus, 1763;
 - (b) *brachypterus* Haan, 1842, as published in the binomen *Gryllus brachypterus*, by reason of being a junior primary homonym of *Gryllus brachypterus* Linnaeus, 1761, of *Gryllus brachypterus* Linnaeus, 1763 and of *Gryllus brachypterus* Ocskay, 1826.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Metrioptera* Wesmaël, 1838 (gender: feminine), type species by monotypy *Gryllus brachypterus* Linnaeus, 1761;
 - (b) *Euthystira* Fieber in Kelch, 1852 (gender: feminine), type species by subsequent designation by Bey-Bienko (1932) *Gryllus brachypterus* Ocskay, 1826;
 - (c) *Duolandrevus* Kirby, 1906 (gender: masculine), type species by original designation by Kirby (1906) *Gryllus brachypterus* Haan, 1842.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:

- (a) *brachypterus* Linnaeus, 1761, as published in the binomen *Gryllus brachypterus* (specific name of the type species of *Metrioptera* Wesmaël, 1838);
- (b) *brachypterus* Ocskay, 1826, as published in the binomen *Gryllus brachypterus* (specific name of the type species of *Euthystira* Fieber in Kelch, 1852), not invalid by the ruling in (1)(a) above;
- (c) *brachypterus* Haan, 1842, as published in the binomen *Gryllus brachypterus* (type species of *Duolandrevus* Kirby, 1906), not invalid by the ruling in (1)(b) above.

History of Case 3200

An application to conserve the specific names of *Gryllus brachypterus* Ocskay, 1826 (currently *Euthystira brachyptera* Caelifera, ACRIDOIDEA) and *G. brachypterus* Haan, 1842 (currently *Duolandrevus brachypterus* Ensifera, GRYLLOIDEA) for two distinct species of grasshopper and cricket (Orthoptera) was received from Hannes Baur (*Natural History Museum, Bern, Switzerland*) and Armin Coray (*Natural History Museum, Basel, Switzerland*) on 13 February 2001. After correspondence the case was published in BZN 59: 180–184 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 182–183. At the close of the voting period on 1 March 2004 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Calder and Ng were on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- brachypterus*, *Gryllus*, Haan, 1842, *Verhandelingen over de natuurlijke Geschiedenis der Nederlandsche overzeesche Bezittingen, door de Leden der natuurkundige Commissie in Indië en andere Schrijvers*, vol. 3, p. 230.
- brachypterus*, *Gryllus*, Linnaeus, 1761, *Fauna Suecica*, p. 237.
- brachypterus*, *Gryllus*, Ocskay, 1826, *Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum*, 13: 409.
- Duolandrevus* Kirby, 1906, *A synonymic catalogue of Orthoptera II. Orthoptera Saltatoria, part 1 (Achetidae et Phasgonuridae)*, p. 50.
- Euthystira* Fieber in Kelch, 1852, *Grundlage zur Kenntniss der Orthopteren (Gradflügler) oberschlesiens, und Grundlage zur Kenntniss der Käfer oberschlesiens . . . Erster Nachtrag*, p. 2.
- Metrioptera* Wesmaël, 1838, *Bulletin de l'Académie Royale des Sciences et des belles-lettres de Bruxelles*, 5: 592.

The following is the reference for the designation of *Gryllus brachypterus* Ocskay, 1826 as the type species of the nominal genus *Euthystira* Fieber in Kelch, 1852:

Bey-Bienko, G.Y. 1932. *Eos*, 8: 43

OPINION 2076 (Case 3193)***Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 (Insecta, Coleoptera): usage conserved by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema***

Abstract. The Commission has ruled that the accustomed usage of the buprestid (jewel beetle) generic names *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 is conserved by the designation of *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema*. Stability was threatened because *C. sumptuosa* Laporte & Gory, 1835 was the valid type species of both genera.

Keywords. Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Chrysodema*; *Iridotaenia*; *Chrysodema sonnerati*; *Chrysodema sumptuosa*; jewel beetles; Africa; Australasia; eastern Palaearctic; Oriental region.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Chrysodema* Laporte & Gory, 1835 are hereby set aside and *Chrysodema sonnerati* Laporte & Gory, 1835 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Chrysodema* Laporte & Gory, 1835 (gender: feminine), type species by designation in (1) above *Chrysodema sonnerati* Laporte & Gory, 1835;
 - (b) *Iridotaenia* Deyrolle, 1864 (gender: feminine), type species by subsequent designation by Kurosawa (1982) *Chrysodema sumptuosa* Laporte & Gory, 1835.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *sonnerati* Laporte & Gory, 1835, as published in the binomen *Chrysodema sonnerati* (specific name of the type species of *Chrysodema* Laporte & Gory, 1835);
 - (b) *sumptuosa* Laporte & Gory, 1835, as published in the binomen *Chrysodema sumptuosa* (specific name of the type species of *Iridotaenia* Deyrolle, 1864).

History of Case 3193

An application to conserve the usage of the buprestid (jewel beetle) generic names *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 by the designation of *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema* was received from C.L. Bellamy (*Plant Pest Diagnostic Lab, California Department of Food & Agriculture, Sacramento, California, U.S.A.*) on 8 February 2001. After correspondence the case was published in BZN 59: 185–187 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. Comments in support of this application were published in BZN 59: 281 and 60: 53.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 186. At the close of the voting period on 1 March 2004 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Calder and Ng were on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Chrysodema Laporte & Gory, 1835, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 1.

Iridotaenia Deyrolle, 1864, *Annales de la Société Entomologique de Belgique*, 8: 25.

sonnerati, *Chrysodema*, Laporte & Gory, 1835, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 3.

sumptuosa, *Chrysodema*, Laporte & Gory, 1835, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 2.

The following is the reference for the designation of *Chrysodema sumptuosa* Laporte & Gory, 1835 as the type species of the nominal genus *Iridotaenia* Deyrolle, 1864:

Kurosawa, Y. 1982. *Bulletin of the National Science Museum Tokyo (Zoology)*, (A)8(4): 188.

OPINION 2077 (Case 3208)***Geodromicus* Redtenbacher, 1857 (Insecta, Coleoptera): given precedence over *Psephidonus* Gistel, 1856**

Abstract. The Commission has ruled that the generic name *Geodromicus* Redtenbacher, 1857 for a widespread and well-known Palaearctic genus of rove beetles (family STAPHYLINIDAE) is conserved by giving it precedence over the senior name *Psephidonus* Gistel, 1856 whenever the two are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Geodromicus*; *Psephidonus*; *Staphylinus plagiatus*; *Geobius kunzei*; rove beetles; Holarctic; Oriental.

Ruling

- (1) Under the plenary power it is hereby ruled that the name *Geodromicus* Redtenbacher, 1857 is given precedence over the name *Psephidonus* Gistel, 1856 whenever the two are considered to be synonyms.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Geodromicus* Redtenbacher, 1857 (gender: masculine), type species *Staphylinus plagiatus* Fabricius, 1798 by designation by Lacordaire (1854) as the type species of the replaced name *Geobius* Heer, 1839, with the endorsement that it is to be given precedence over the name *Psephidonus* Gistel, 1856 whenever the two are considered to be synonyms;
 - (b) *Psephidonus* Gistel, 1856 (gender: masculine), type species by monotypy *Geobius kunzei* Heer, 1839, with the endorsement that it is not to be given priority over the name *Geodromicus* Redtenbacher, 1857 whenever the two are considered to be synonyms.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *plagiatus* Fabricius, 1798, as published in the binomen *Staphylinus plagiatus* (specific name of the type species of *Geodromicus* Redtenbacher, 1857);
 - (b) *kunzei* Heer, 1839, as published in the binomen *Geobius kunzei* (specific name of the type species of *Psephidonus* Gistel, 1856).

History of Case 3208

An application to conserve the generic name *Geodromicus* Redtenbacher, 1857 for a widespread and well-known Palaearctic genus of rove beetles (family STAPHYLINIDAE) by giving it precedence over the senior name *Psephidonus* Gistel, 1856 was received from Lee H. Herman (*American Museum of Natural History, New York, N. Y., U.S.A.*) on 6 June 2001. After correspondence the case was published in BZN 59: 188–190 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 189. At the close of the voting period on 1 March 2004 the votes were as follows: 19 Commissioners voted FOR the proposals, 4 Commissioners voted AGAINST, Calder and Ng were on leave of absence.

Voting against, Alonso-Zarazaga commented that since *Geodromicus* is not in prevailing usage priority must stand.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Geodromicus Redtenbacher, 1857, *Fauna austriaca. Die Käfer*, Ed. 2, p. 244.

Psephidonus Gistel, 1856, *Die Mysterien der europäischen Insectenwelt . . .*, p. 29.

plagiatus, *Staphylinus*, Fabricius, 1798, *Supplementum entomologiae systematicae*, p. 180.

kunzei, *Geobius*, Heer, 1839, *Fauna Coleopterorum Helvetica*, 1(2): 193.

The following is the reference for the designation of *Staphylinus plagiatus* Fabricius, 1798 as the type species of the nominal genus *Geodromicus* Redtenbacher, 1857:

Lacordaire, J.T. 1854. *Histoire des insectes. Genera des coléoptères ou exposé méthodique et critique de tous les genres proposés jusqu'ici dans cet ordre d'insectes*, vol. 2, p. 136.

OPINION 2078 (Case 3224)***Mycetoporus mulsanti* Ganglbauer, 1895 (Insecta, Coleoptera): specific name conserved**

Abstract. The Commission has ruled that the specific name of *Mycetoporus mulsanti* Ganglbauer, 1895, for a widespread mountain species of Palaearctic rove beetle (family STAPHYLINIDAE), is conserved by the suppression of a recently resurrected largely unused senior synonym, *Mycetoporus tenuis* Mulsant & Rey, 1853.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Mycetoporus*; *Mycetoporus mulsanti*; *Mycetoporus tenuis*; rove beetles; Palaearctic; mountain forests; alpine vegetation zone.

Ruling

- (1) Under the plenary power the name *tenuis* Mulsant & Rey, 1853, as published in the binomen *Mycetoporus tenuis*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *mulsanti* Ganglbauer, 1895, as published in the binomen *Mycetoporus mulsanti*, is hereby placed on the Official List of Specific Names in Zoology.
- (3) The name *tenuis* Mulsant & Rey, 1853, as published in the binomen *Mycetoporus tenuis* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3224

An application to conserve the specific name of *Mycetoporus mulsanti* Ganglbauer, 1895 for a widespread mountain species of Palaearctic rove beetle (family STAPHYLINIDAE) was received from Michael Schülke (*Rue Ambroise Paré, Berlin, Germany*) on 3 December 2001. After correspondence the case was published in BZN 59: 194–195 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 195. At the close of the voting period on 1 March 2004 the votes were as follows: 21 Commissioners voted FOR the proposals, 2 Commissioners voted AGAINST, Calder and Ng were on leave of absence.

Voting against, Bouchet commented that the application states that *Mycetoporus mulsanti* is of 'ecological and conservation interest', but gives no evidence of that. Since the name appears to be used only in taxonomic works, there is no compelling reason not to apply the Principle of Priority.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

mulsanti, *Mycetoporus*, Ganglbauer, 1895, *Die Käfer von Mitteleuropa. Zweiter Band. Familienreihe Staphylinoidea. 1. Theil: Staphylinidae, Pselaphidae*, p. 375.
tenuis, *Mycetoporus*, Mulsant & Rey, 1853, *Opuscula Entomologica*, 2: 54.

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OPINION 2075 (Case 3200). *Gryllus brachypterus* Ocskay, 1826 (currently *Euthystira brachyptera*) and *Gryllus brachypterus* Haan, 1842 (currently *Duolandrevus brachypterus*) (Insecta, Orthoptera): specific names conserved 126

OPINION 2076 (Case 3193). *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 (Insecta, Coleoptera): usage conserved by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema* 128

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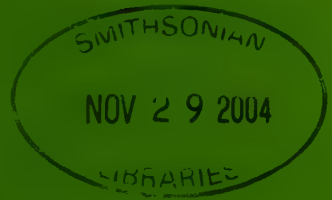
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 61, part 3 (pp. 133–208)

30 September 2004

Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume), as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be by e-mail to 'iczn@nhm.ac.uk' where possible.

(2) The Commission votes on applications six to eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to 'join-iczn-list@lyris.bishopmuseum.org', leaving the subject line and body of the message blank (for further details see BZN 59: 234).

(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 61, part 2, 30 June 2004) went to press. Under Article 82 of the Code, existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 3261: THEBINI Wenz, 1923, MONACHINAE Wenz, 1930 (1904), and SPHINCTEROCHILIDAE Zilch, 1960 (1910): proposed conservation (Mollusca, Gastropoda). P. Bouchet & J.-P. Rocroi.

CASE 3317: (replaced title) *Scarabaeus arenarius* Olivier, 1789 (currently *Aphodius arenarius*) and *Scarabaeus fasciatus* Olivier, 1789 (currently *Aphodius fasciatus*) (Insecta, Coleoptera): proposed conservation of the specific names. F.-T. Krell.

CASE 3318: *Glossophaga morenoi* Martínez & Villa, 1938 (Mammalia, Chiroptera): proposed conservation of the specific name. S.T. Álvarez-Castañeda & A.M. Maeda-Martínez.

CASE 3319: *Helix papillaris* Müller, 1774 (currently *Papillifera papillaris*; Mollusca, Gastropoda): proposed conservation of the specific name. F. Giusti & G. Manganelli.

CASE 3320: *Papilio sapho* Drury, 1782 (currently *Heliconius sapho*) (Insecta, Lepidoptera): proposed conservation of the specific name. G. Lamas & J.L.B. Mallet.

CASE 3321: *Bythinella* Moquin-Tandon, 1856 (Mollusca, Gastropoda): proposed conservation of usage of the generic name. D. Kadolsky.

CASE 3322: *Baetis pentaphecodes* Ujhelyi, 1966 (Insecta, Ephemeroptera): proposed precedence of the specific name over *Baetis nexus* Navás, 1918. M. Sartori & T. Soldán.

CASE 3323: *Rana ocellata* Linnaeus, 1758 (Amphibia, Anura): proposed conservation of usage of the specific name by designation of a neotype. R.W. Heyer, U. Caramaschi & R.O. de Sá.

CASE 3324: *Tramea* Hagen, 1861 (Insecta, Odonata): proposed conservation. K.-D.B. Dijkstra, J. van Tol, J. Legrand & G. Theischinger.

CASE 3325: DISTENIIDAE Thomson, 1860 (Insecta, Coleoptera): proposed conservation. M.A. Monné & A. Santos-Silva.

The International Commission on Zoological Nomenclature and its publications

The roles of the International Commission on Zoological Nomenclature and of the International Trust for Zoological Nomenclature are described in the *Bulletin of Zoological Nomenclature*, vol. 61, pages 2–6, together with details of the following publications and how to obtain them:

Bulletin of Zoological Nomenclature,
International Code of Zoological Nomenclature,
Official Lists and Indexes of Names and Works in Zoology,
Towards Stability in the Names of Animals—a History of the International Commission on Zoological Nomenclature 1895–1995.

Full details will be found on the Commission's Website www.iczn.org.

Funding Appeal

On 19 May 2004 the Chairman of the International Trust for Zoological Nomenclature, the Earl of Cranbrook, held a reception in the Spencer Gallery of the Natural History Museum, London, to honour a visit by the President of the International Commission on Zoological Nomenclature, Dr Neal Evenhuis, and to relaunch the Trust's Funding Appeal.

Lord Cranbrook opened the proceedings with the following introductory remarks:

The modernisation and long-term security of the Commission

'Earlier today, we held the Trust's Annual General Meeting, attended among others by Dr Neal Evenhuis, President of the International Commission on Zoological Nomenclature, the global regulator of animal names. As you may know, the Commission was founded in 1895, by common consensus of the zoological community, in order to resolve the increasingly chaotic state of animal nomenclature at the time. Commissioners are drawn from many countries of the world and, together, combine expertise in all major animal groups.

It is our pleasure today, here in this great museum of taxonomic research, to welcome the current President of the Commission and other distinguished guests. I hope Neal will be able to meet many of you, as key users of the International Code of Zoological Nomenclature and customers of the Commission.

My own involvement began almost fifty years ago, when my first employer (Curator of the Sarawak Museum) tasked me with 'sorting out' the edible nest swiftlets—still regarded as one of the most difficult group of birds, taxonomically. The solution involved referral to the Code, in the version current at that time. Because of this early awareness of the importance of the Code, in my subsequent University career I gave lectures on zoological nomenclature and its rules and regulation. How many zoology students are offered such a course nowadays?

All of us here are users of animal names governed by the Code, and many of us have benefited from the regulatory role of the Commission in ensuring the stability of zoological names. But at the start of the 21st century, there is an enhanced role for the activities of the Commission. The world faces a biodiversity crisis. There is international consensus on the urgent need to identify and name the diversity of the animal kingdom, so that governments and institutions can better target conservation effort. Without the regulation provided by the Code, and overseen by the Commission, there is once again a grave risk of disordered confusion in animal names.

In response, the Commission is determined to maximise the benefits of IT to enhance its working systems and extend its accessibility to the international community of users. This project will need special finance. But the urgent concern of the Trust is focused on the longer-term challenge. The current excess of costs over income jeopardises the security of the Commission itself.

The Trust, with the Commission, has therefore resolved to mount an appeal, to raise project funding to manage the transition to a web-based system and, more critically, to enhance revenue and obtain a capital sum sufficient to provide a perpetual endowment. Only with this endowment can we, of the present generation, guarantee that the services of the Commission will be safeguarded for our successors.

We are grateful for the donations we have already received to help us forward in this task.

Today, we alert you to the chaos that could once again supervene in zoological nomenclature in the absence of the Commission. I look to the international zoological community to do all possible to assist us in raising the large—but not impossible—sums of money needed to ensure the security of the Commission for ever’.

The Commission President, Dr Evenhuis, then thanked those present and spoke of the importance of the Commission’s role in the zoological community. He underlined the long-term aim of the Commission to support the activities of zoological taxonomists, stressing that with adequate funding a free service could eventually be provided.

Finally, the Commission’s Executive Secretary, Dr Andrew Polaszek, gave a presentation that can be broadly summarised as follows:

‘The Commission essentially fulfils a dual function: firstly to create, publish and periodically revise the International Code of Zoological Nomenclature, and secondly to rule on cases of nomenclatural uncertainty. The Code has now passed through four editions, the latest published in 1999 as the Code for the new millennium. Cases of nomenclatural uncertainty are dealt with in the pages of the Commission’s journal, the *Bulletin of Zoological Nomenclature*. In brief, where a problem arises with animal names, a Case is published in the *Bulletin*, and the opportunity is provided to publish support or counter-arguments. The Commission votes on the application, and an Opinion or ruling is published. Without the Commission’s representation of an authoritative nomenclatural system, the result would be chaos. Nomenclature is fundamental to taxonomy and systematics, which are themselves the keys to understanding the world’s biodiversity. Nomenclature and taxonomy are central to identification, authentication, verification and quality control in zoology. Applications of zoological nomenclature can be found first and foremost in biodiversity studies, as well as in human and animal health, agriculture, fisheries, ecotourism, quarantine, customs, trade in animal products (e.g. CITES – the Convention on International Trade in Endangered Species of wild fauna and flora) and conservation (e.g. red data books).

Despite the undisputed importance of the Commission’s work, many aspects of the Code still remain ambiguous or obscure for many users. Very often, despite extensive familiarity with the Articles of the Code, two experienced users may disagree fundamentally on the correct interpretation of an Article or Section. Reference to the archives of the Commission’s discussion list at ‘iczn-list@lyris.bishopmuseum.org’ highlights the multitude of such cases. For this reason, the Code, and the activities of the Commission and Commission Secretariat in particular, are in need of reform. Some of the aims of these reforms are as follows: to have all the Commission’s publications freely available on the web, so that interested parties have guaranteed access to authoritative data on animal names; to introduce the mandatory registration of animal names with the Commission; lists of approved publications in which new names and nomenclatural changes are permitted; complete Official Lists and Indexes of animal names back-dated to Linnaeus’s *Systema Naturae*, 10th edition

1758 (the starting point of modern binominal zoological nomenclature); an 'overhaul' of the Code on the web with unambiguous explanations of Articles and examples.

All of these reforms will require considerable financial input, hence the relaunch today of our Funding Appeal. The dual aims of the Appeal are to raise an endowment of £3,000,000 (approximately US\$ 5,000,000) which would enable the Commission to operate in perpetuity on the interest. At the same time we will be extending our efforts to attract regular subscription income from the zoological community through organisations such as the American and the European Associations for Zoological Nomenclature. We are extremely fortunate to be able to announce that Prof. E.O. Wilson of Harvard University has agreed to take on the role of Patron of our Appeal.

Finally, we thank The Gatsby Charitable Foundation, The John Spedan Lewis Trust, The Natural History Museum, London (and especially the Department of Palaeontology) for their support'.

'Published Works' in the electronic age: recommended amendments to Articles 8 and 9 of the Code

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Introduction: electronic documents and scientific publishing

The advent of the Internet has brought about one of the most substantial revolutions in publishing since the invention of the printing press circa 1450 A.D. Internet (primarily World-Wide Web, or WWW) distribution of manuscripts has added an unprecedented degree of ease and freedom to the traditional publication process. Prior to widespread availability of, and access to, electronic publications, authors of virtually any type of document intended for widespread distribution were required to first find a publisher, and then undergo multiple reviews by editors before a final product could be produced. Distribution was then left entirely to the publisher. Alterations to finished products generally meant beginning the process over again and the issue of sequentially numbered editions. Publishing houses, with finite resources and funding, had to be highly selective of what, from a plethora of submissions, would and would not be published, and preference was generally given to manuscripts of particular importance, timeliness, or (in reality) marketability and promise of profit. Hence, not everything was published.

With the advent of the Internet, many aspects of this process could be avoided. Widely available WWW-authoring software allows authors to finalize manuscripts themselves, and ubiquitous web servers allow them to place their documents in a position of instantaneous and virtually universal distribution to readers. Thus, the author also became the publisher, printer, and distributor. Subsequent additions, corrections, and other editing could be done as and when necessary so an electronic document could be continually up-to-date. A reader has only to log in to see the latest version, though ideally new editions should be cited as such.

From the perspective of the scientist, electronic publishing and the Internet are not necessarily beneficial. The processes of peer-review and editing a manuscript are integral parts of scientific publishing. Prior to the Internet, it was extremely difficult for a non-scientist to publish the results of research in the formal, scientific literature ('primary sources') largely because of this reviewing and editing process. Today, in contrast, anyone can publish literally anything ('secondary sources'), either or both in print and, especially, on-line, regardless of its scientific quality or whether or not it has undergone peer-review. This is particularly troublesome for biologists and systematists because there is currently no universally recognized means of labeling what information has been peer-reviewed and thus invested with the 'official' approval of the scientific community. Scientists are fundamentally educators, whether educating other scientists or the general public, and it is the public in particular that is usually unable to distinguish between valid (primary) and questionable (secondary) scientific information sources on the WWW. Teachers and librarians often spend a great deal of time teaching students how to differentiate primary and secondary sources. The public (including neophyte biologists) may thus be easily

misinformed. This is a significant problem that continues to be addressed on many levels in the scientific and educational communities. Because of this, WWW sites, even if they contain valid scientific information, are rarely cited in the bibliographies of scientific papers and are generally viewed with some suspicion by scientists.

However, it must also be emphasized that the Internet carries a substantial boon to the scientific community (Godfray, 2002). Numerous WWW-based taxonomic initiatives already exist (see review in Mallet & Willmott, 2003), and it is becoming more widely recognized that electronic access to, and dissemination of, information will be critical to a more complete assessment of biodiversity (Wilson, 2003). There is, however, a more important and immediate benefit: specifically, the easy, instantaneous, widespread distribution of formal, peer-reviewed, scientific documents. The debate, as it presently stands, is 'Which is more powerful: the negative ability of the Internet to mass-produce fallacious, unfounded, and uncitable information, or its positive capacity to easily disseminate truly valuable scientific documents?'

Electronic publishing and the Code

Although most biologists are not systematists (Garritty & Lyons, 2003), the act of naming new taxa remains a fairly common occurrence and is still a fundamental process. It must be emphasized that the International Code of Zoological Nomenclature does not concern itself with matters of quality (peer-review), only with the rules of establishing new, or emending existing, names. As a result, there is no real difference in content between a nomenclatural action that appears in a manuscript in a non-peer-reviewed journal, a non-peer-reviewed document that is self-published in a print medium (e.g. Olshevsky, 1991, an often cited palaeontological example) or an electronic document. (It should be noted that many electronic documents, particularly on-line versions of established journals, *are* peer-reviewed). However, because of the wide (and ever-growing) availability of Internet access and because of the establishment of a system for universal citability of on-line documents, Articles 8 ('What constitutes published work') and 9 ('What does not constitute published work') of the Code now contain a paradox that is more a response to one potentially harmful aspect of the Internet (lack of consistent citability) than an acknowledgement and acceptance of its greatest power (facilitating rapid and broad-scale distribution of systematic documents). Article 8 states that a published work must be (a) issued for the purpose of providing a *public and permanent* scientific record, (b) obtainable *free or by purchase*, and (c) produced in an edition containing simultaneously obtainable copies by a method that assures *numerous identical and durable copies* (emphasis here by the current author). Article 9 specifies numerous qualifications to Article 8 rules and outlines specific things that do *not* constitute a 'published work'; of particular interest here is Article 9.8, which specifies that 'text or illustrations distributed by means of electronic signals (e.g. *by means of the World Wide Web*)', does not constitute a 'published work'.

These rules were not, of course, created on a whim – there are sound, logical reasons behind them. A 'public and permanent' scientific record lies at the heart of scientific publishing, both for the education of the scientific community and public as well as for providing access to literature by future generations. 'Numerous identical and durable copies' again addresses the concept of long-term preservation for future

generations. Distribution 'by means of the World Wide Web' was undoubtedly singled out as an unacceptable means of taxonomic publishing for reasons of (1) long-term preservation, (2) accessibility, and (3) citability. The aforementioned paradox in the current Code is that none of these is any longer a substantial impediment to achieving the goals of the Code regarding zoological nomenclatural actions with respect to electronic documents.

Electronic documents and long-term preservation

In the electronic age, the concept of 'long-term preservation' of a document containing information pertinent to zoological nomenclature must be viewed from two standpoints: one in comparison to hard-copy (i.e. print) preservation and one of the inherent properties of the electronic medium.

Numerous, widespread libraries, whose fundamental purpose is to preserve information, largely in hard-copy (print) publications, for long-term use by generations of readers continually deal with random factors that act to destroy such publications. These factors are numerous and range from internal paper acidity to external factors such as climate, consumption by a variety of organisms, etc. Frequently, important documents are reduced to 'rare' status, viewable only by a select (usually local) few and only under special circumstances. The Code has provisions dealing specifically with older (pre-1930) publications, but in the broader sense, any 'modern' publication will, in the long-term, be subjected to the same issues, and 100+ years from now, they may be in similar physical situations to what are currently considered 'old' publications. Certainly, concern over issues of paper quality, climate control, etc. have lessened as technology has advanced, greatly improving the preservability of many documents, but certainly not all: numerous documents covered under the post-1930 provisions of the Code will suffer as have many of their pre-1930 counterparts. In short, a document's existence in hard-copy form is not a guarantee of either its accessibility to the broadest possible range of the scientific community or its continued existence through time.

Electronic publications, while certainly not as subject to the physical entropies of paper quality, climate, etc., do indeed suffer from preservational issues. There is little disagreement that anything published electronically *must* be archived in some format. WWW addresses and accessibility have not yet achieved the stability enjoyed by more tangible institutions. The most important, and readily visible, issue is the continual change in preferred conservation media. Many electronic documents of just a few decades ago, preserved on such media as floppy disks and other removable cartridges, though 'preserved', are no longer accessible simply because the technology required to view them is not widely available. More recently, there has been a shift to storage on compact discs (CDs) and digital video discs (DVDs), as well as newer types of proprietary removable cartridges (e.g. flash drives, etc.), and there is a general sense of permanence. However, given the rate of technological change, there is no way to determine whether or not, even 10 or 20 years from now, anyone will have the ability to retrieve information from these media. It is an expensive proposition to continually update libraries of stored electronic data to the currently favored common medium, and few, if any, libraries have the funds or willingness to accept such responsibility. More worrying is the possibility, however unlikely, of some global catastrophe that disables electronic systems. In such a case, even if the instruments

exist to read electronically-stored information, it could not be activated. Hard-copy publications, of course, do not suffer this particular drawback.

One way to avoid this problem is the dissemination of both hard-copy *and* electronic versions of a document. Provided these versions are identical in every aspect (including citability), the information contained in the manuscript is simultaneously widely available and preserved for long-term use. Printing electronic manuscripts is already commonplace with individual zoologists; its practice amongst archival institutions is unknown. Most electronic documents *do* exist in numerous hard-copy editions. This is particularly true of scientific journals that use the WWW to distribute papers contained in their issues while also producing printed, hard-copy editions of the journal. The only new problem created by this practice is one of timing (see below). In summary, electronic documents really are not any more or less preservable than hard-copies; the issues surrounding the means of preservation are simply different. But just as preservation issues do not prevent the use of print media, they should also not impede the publication of zoological nomenclatural actions in electronic media as long as archival requirements are met.

Electronic documents and accessibility

As before, issues of electronic document accessibility require comparison with print-only versions. One frequently encountered reservation about electronic documents and the WWW is that computer access is severely limited in many parts of the world. Electronic documents are simply unavailable to many researchers. While there can be no doubt of the truth of this fact, the argument is actually false because hard-copy manuscripts can be, and often are, just as inaccessible as (or even less accessible than) electronic media. This is particularly true of publications by small, regional institutions and small-press or self-published documents, both of which often suffer from severely restricted distributions. A few avenues are available for obtaining such materials (e.g. InterLibrary Loan programs) but, as noted above, some documents are too rare or too fragile to be copied or lent. Occasionally, even locating a subscribing institution proves impossible. In the end, some material simply cannot be accessed, regardless of whether it is electronic or in print. If anything, electronic media have an advantage over print in this respect; some programs (e.g. the United States Library of Congress National Digital Information Infrastructure and Preservation Program, <http://www.digitalpreservation.gov>, and the Million Books Project, <http://zeeb.library.cmu.edu/Libraries/LIT/Projects/1MBooks.html>) are in place to scan rare and fragile hard-copy manuscripts into an electronic form that can be instantly transmitted or from which copies can be printed at leisure without further need to access the original. Such copies can be easily lent, sold, or given on request.

Electronic documents, timing, citability, and the concept of 'Publication': a case study

In 2002, an issue arose concerning the name of a new fossil taxon that demands a re-examination of the Code's rules concerning electronic documents. Zhang et al. (2002) established *Epidendrosaurus ningchengensis* based on a specimen of a peculiar, small, theropod dinosaur from the Upper Jurassic-Lower Cretaceous Daohugou Formation (a probable correlate of the Yixian Formation) of Nei Mongol Province, China. The paper defining and diagnosing the taxon was initially released in the

on-line version of the respected journal *Naturwissenschaften* on 21 August 2002. Because hard-copy publication and distribution necessarily take more time than electronic publication, the print version of the same article (indeed the same issue of the journal) did not appear until 30 September 2002 (D. Czeschlik, pers. comm., 2003).

At about the same time, Czerkas & Yuan (2002) introduced *Scansoriopteryx heilmanni* for a very similar specimen from the Yixian Formation in neighboring Liaoning Province. *S. heilmanni* was published in the inaugural issue of *The Dinosaur Museum Journal* of the Dinosaur Museum in Blanding, Utah, an auspicious publication that meets all the regulations of Article 8 of the Code. However, because it was distributed (largely by mail order) from a single locale by a small institution, it unfortunately suffered a reduced distribution compared with *Naturwissenschaften*. Although there has been no formal, published (in any format) comparison of the two specimens to determine whether or not they represent a single species, they bear certain unusual, probably autapomorphic features that suggest that they do in fact represent the same taxon. The question is: which name — *Epidendrosaurus ningchengensis* or *Scansoriopteryx heilmanni* — is valid for this taxon?

The volume in which the *S. heilmanni* paper appeared bears a publication date of 1 August 2002, and by Article 21 of the Code, this should be considered the 'date of publication' and obviously predates the 21 August appearance of *E. ningchengensis*. The issue of *The Dinosaur Museum Journal* appears, however, not to have become widely available (i.e. distributed or available for distribution by purchase) until about 2 September 2002, *after* the 21 August 2002 electronic *Epidendrosaurus* paper but *before* the 30 September 2002 hard-copy publication date. By strict letter of Article 21 of the Code, *S. heilmanni* should have priority over *E. ningchengensis*. However, while the Code goes to great lengths to describe what constitutes both the date of publication, and the criteria for publication, of taxonomic names, it does *not* discuss what is, in the ontological sense, a 'publication'. A 'publication', as inferred from Article 8, can be defined as constituting either (a) the first *appearance* in print of a zoological taxon name that meets Article 8 specifications, regardless of whether or not that printing is distributed, or (b) the first actual, hard-copy release (distribution) of the manuscript defining and diagnosing the taxon that meets Article 8 specifications. As the *Epidendrosaurus/Scansoriopteryx* case highlights, there can be a substantial time difference between 'publication' as a matter of the date a paper came off the printing press, and 'publication' as a matter of distribution to the public. The difference is best illustrated by an extreme hypothetical situation: a 'publication' (e.g. the printing of hard copies) of a document occurs on 1 January 2005, but then all copies of the 'publication' are stored in a warehouse, wholly inaccessible to anyone. Distribution does not occur until a much later point in time — let us say, 1 July 2008. In accordance with Article 21, the date imprinted on the document (1 January 2005) is the date to be cited for the publication and any nomenclatural actions therein, and any competitive actions published after that date are subject to synonymy. Ostensibly, the document was printed with every intention of being issued for the purpose of providing a public and permanent scientific record (satisfying Article 8.1.1) and in simultaneously obtainable copies by a method that assured numerous identical and durable copies (satisfying Article 8.1.3) long before it is distributed. But this is nullified by the requirement of Article 8.1.2 because, as of the printed date, it was not available to the public.

In the real world, of course, it is unlikely that anyone would purposefully delay distribution of a document. However, a myriad of factors (mechanical, operational, logistical, etc.) can delay the actual distribution of an end product. Because of the potential, either accidental or deliberate, for delay between the dates of printing and distribution, it is clear that the date of actual production (i.e. emplacement on a hard-copy medium) *cannot* satisfy Article 8.1.2. Only the date of *issue* to the public can fulfil this criterion, and thus create a 'published work' as defined by Article 8. In short, if it is not available to be viewed by the public, then it cannot be considered 'published'. (Incidentally, this is already something of a dispute when citing some papers. Journals that are issued on a periodic but regular basis frequently print the final yearly issues of a journal in December of one year, with the date of that year imprinted on the cover along with the volume number, but it often takes enough time for the issue to circulate to libraries and other subscribers that it effectively only becomes viewable in January of the next year. The debate centres on the proper citation of the issue: does it include the year in which the issue was printed or the year it was distributed? Conversely, issues of some publications bearing a 'January' date are available in the preceding December, and similar issues arise). There are, however, valid concerns over how to pinpoint a date of 'publication', in terms of distribution and broad availability, because (a) distribution would depend entirely on the time of its first mailing to subscribers, first customer order, or first shipment to a public library, and (b) distribution time increases with distance from the distribution center. The latter would require an arbitrary delineation of some geographic radius from the distribution center that would constitute an equally arbitrarily defined 'sufficient' number of people to constitute the 'public' specified in Article 8.1.1. This issue remains to be resolved.

Given this, it seems that *E. ningchengensis* should have priority over *S. heilmanni*, since it was the first name issued in proper format to the public in a manner that meets *all* the criteria of Article 8. In point of fact, between 21 August and 30 September 2002, downloads of the electronic version of the *E. ningchengensis* paper formed a noticeable percentage of the total number of downloads from the relevant issue of *Naturwissenschaften* (D. Czeschlik, pers. comm., 2003) — it was thus both widely available and broadly distributed. The only remaining impediment for the nomenclatural validity of *E. ningchengensis* is that the paper falls under the purview of Article 9.8: its initial release on 21 August was in electronic format. The electronic version of the *E. ningchengensis* paper is identical in all respects to the hard-copy, printed version issued later by *Naturwissenschaften* except in two ways: (1) the time of issue, and (2) the ISSN number of the issue (the electronic version is 1432–1904, while the printed copy is 0028–1042). The latter is unimportant since ISSN numbers are rarely provided in bibliographic citations. However, the identical content of both versions do share a unique means of being cited: the Digital Object Identifier (DOI) code. DOIs provide a means of referencing the same body of information, regardless of its existence in electronic and/or printed format.

Electronic documents, citability, DOIs and the Code

The DOI system is commissioned and managed by the not-for-profit International DOI Foundation (for detailed information, see <http://www.doi.org>). A DOI consists

of a series of numbers and letters that is unique to any one document (one unique set of documents), regardless of format. Technically, DOIs are not limited to text-based publications, but can be issued to photographs, etc. For the purposes of this proposal, only scientific publications will be considered. The DOI consists of a prefix and a suffix, each with no length requirement. The prefix refers to any issuing organization; an organization may have more than one, but for the purposes of zoological nomenclature, it is probable that all issues of a journal series would have the same prefix. The suffix identifies the individual document and its characters can contain the name of the journal as well as the date of issue along with the unique code for each individual document. For electronic documents, the DOI can be coupled with a Uniform Resource Locator (URL, or WWW address) to become 'actionable': one can simply click on the DOI to be brought directly to the relevant document (assuming subscription access is available, an obstacle shared with print media). As an example, the DOI number for the *E. ningchengensis* article is doi:10.1007/s00114-002-0353-8, and its citable URL affiliate would be <http://dx.doi.org/10.1007/s00114-002-0353-8>. The reader is referred to the list of cited references below to view an example of the inclusion of a DOI in a bibliographic citation. In essence, the DOI is a 'supercharged bar code' (Walter, 2001) for publications and, more importantly, content. (The electronic version of a document accessed via its DOI number has an additional advantage over traditional, paper documents in that the electronic version can contain links to other DOI material — in essence, a document can 'contain' its referenced documents for easy access (Walter, 2001)). Because both the 21 August electronic and 30 September printed versions of the *E. ningchengensis* article have the same DOI number, they are cited identically, and the dual 'publication' dates become irrelevant; only the first one matters, and the date of publication is firmly defined as 21 August 2002.

Archival systems (e.g. CrossRef) currently register DOIs for journal articles, and those registrations are carried into databasing systems (e.g. MedLine, ISI); future expansion of this system may include book chapters, conference proceedings, etc. (Paskin, 2002). Of more immediate significance, an increasingly large number of journals relevant to the zoological community are registering DOI numbers for their content, including *Nature* and *Science*. Although no zoological journal has yet taken this step, DOI numbers are succeeding even page numbers in some prominent journals (e.g. *Physical Review* of the American Physical Society (APS) — articles are cited using *only* their unique DOI suffixes, e.g. *Physical Review A* 67: 050301 [2003] — readers can examine this practice first hand via the APS publications web site at <http://pra.aps.org>). This practice, probably appearing ungainly to readers unfamiliar with it, alleviates the need to await a hard-copy publication to establish page numbers for a 'complete' bibliographic citation of a paper. This allows for easier and faster incorporation of newly published material into manuscripts and thus the more rapid completion of manuscripts for submission, keeping submitted content timelier. In a somewhat less radical step, *Nature* provides DOI numbers for articles available on-line prior to hard-copy issuance and recommends that, until a printed copy with page numbers is available, on-line articles be cited using only the DOI number (this directive is spelled out at *Nature's* Advance On-line Publication (AOP) site, http://www.nature.com/cgi-taf/DynaPage.taf?file=/nature/journal/vaop/ncurrent/toc_r.html). *Nature* also specifies (<http://www.nature.com/nature/journal/>

vaop/ncurrent/about.html) that their AOP versions of an article are definitive *because* of their DOI numbers. (At the same site, *Nature* also discusses the increasing irrelevance of the date of printing as a 'publication date' owing to the advent of electronic publication). In the case of *E. ningchengensis*, *Naturwissenschaften* makes the same statement at <http://www.springeronline.com/sgw/cda/frontpage/0,10735,5-113-2-99044-0,00.html>; undoubtedly, other journals have similar proclamations. The 21 August, electronic version of the *E. ningchengensis* paper, is, therefore, definitive in all the same ways as would be any hard-copy release. In a move perhaps highly significant for the Code, steps are currently under way to utilize the DOI system to establish new standards for the International Code of Prokaryotic Nomenclature (Garrity & Lyons, 2003).

The DOI system also alleviates the ephemeral nature of the URL system — the DOI number will always 'point' to the same content regardless of whether the URL of the issuing organization or journal changes or disappears. DOIs thus act as a single, authoritative repository for data (Paskin, 2002). It thus *increases* the long-term preservability of electronic media while simultaneously not interfering with its ability to be used for active research (Paskin, 2002). Although it does not address the concept of long-term archiving of electronic documents on some storage medium, the nature of DOI architecture is such that new means of accessing data can be created at any point in time to access the same raw data (i.e. document content) (Paskin, 2002 and references cited therein). This goes a long way toward addressing issues of publication availability in the face of rapidly-changing technology, and provides electronic documents a longevity similar to that of traditional, hard-copy publications.

Conclusions

I propose to the Commission that, under Article 78.3 ('Amendments to the Code'), Articles 8 and 9 of the current Code require both pro- and retroactive (to the effective date of the Fourth Edition, 1 January 2000) modification to accommodate the following issue: documents published electronically *with DOI numbers and that are followed by hard-copy printing and distribution* be exempt from Article 9.8 and be recognized as valid, citable sources of zoological taxonomic information and that their electronic publication dates be considered definitive. Note that this does not *require* electronic publications to have DOI numbers; only that any paper appearing in electronic format that *does* have a DOI number, and is followed by traditional, hard-copy issuance, is an acceptable place for the appearance of zoological nomenclatural action. Electronic publications lacking DOI numbers lack the citability benefits enjoyed by DOI registered documents and, regardless of whether followed by hard-copy release, will still be subject to Article 9.8 and be considered invalid for zoological nomenclatural actions. Such a change may be issued as a Declaration (Article 78.3.3 and subject to the provisions of Article 80.1), since it entails only minor changes to Articles 8.1.3 and 9.8, as follows (recommended additions in italics):

Article 8.1.3. It must have been produced in an edition containing simultaneously obtainable copies by a method that assures numerous identical and durable copies, *including documents that contain identical Digital Object Identifier numbers and for which electronic documents are followed by hard-copy release.*

Article 9.8. Text or illustrations distributed by means of electronic signals (e.g. by means of the World Wide Web), *except where such material meets the provisions of Article 8.1.3; or . . .*

No change is required to Article 21 because the date inherent to a DOI assignation falls within the scope of Article 21.2, as worded.

The clause added to Article 8.1.3 may, to ensure incentive is provided to follow electronic copies with paper printing for additional archival security, have inserted a specified maximum amount of time after which a hard copy *must* follow the electronic version, failing which any nomenclatural action in the electronic version becomes void. A name published electronically but never followed by hard copy issue would be invalid, and the validity of any names (potential synonyms) proposed subsequent to its electronic issue would follow their chronological issue. This would create brief periods (the time frame between electronic issue and the final date during which the name would be valid only if subsequently issued in print) during which synonymy could not be established because one criterion (the time aspect) has not been fulfilled — the electronic name would be ‘conditionally available’. No ready solution to this problem presents itself, though the author notes from personal observation that, for most journals, the amount of time separating electronic and hard copy publication is usually less than three months. Longer mandated periods of time would increase the potential for this type of problem to occur, but longer periods would be desirable because they allow temporary hard copy publication problems to be overcome. The establishment of a formal, mandatory registry of animal names as part of the Code (present or future), as has been suggested on many past occasions (e.g. Thorne, 2003), would help alleviate the problem by tracking the validity of names and their dates of description (which can be based on, and easily tied to, a DOI), making it easier to determine whether or not a conditionally available name ever becomes fully available and, if not, which subsequently proposed name would become the senior synonym. The same principle would apply to any junior homonym published during this period of conditional availability: such a homonym would not be valid unless or until the senior homonym lost its validity by which time a substitute name might have been proposed for the junior name.

With the ever increasing number of researchers working on a finite set of zoological taxa, combined with the advent (and increasing prevalence) of electronic publication, situations such as that exemplified by the *Epidendrosaurus ningchengensis*/*Scansoriopteryx heilmanni* case could easily become more common. It is thus critical that the Commission takes steps to alleviate such situations and regulate taxonomic synonymies by recognizing that some electronic publications (those with DOIs) constitute ‘publication’ as much as any printed manuscript does. Should the Commission adopt the recommended changes, the *E. ningchengensis*/*S. heilmanni* case (should they prove to represent the same taxon) is readily resolved without further involvement by the Commission, as *E. ningchengensis* is demonstrably the senior name.

Recognizing DOIs as a suitable means of identifying content that contains nomenclatural actions in joint electronic and paper publishing enables zoological systematists to take advantage of accelerated publishing and more widespread and rapid distribution of zoological matter to both the scientific community and the

public. Furthermore, it would be a logical amendment in light of the fact that the scientific publishing community, as exemplified by *Nature*, *Naturwissenschaften*, and numerous others, has itself redefined the term ‘published’ to include electronic publications. The amendments recommended here target the distinctive — and highly desirable — benefits inherent in coupling rapid on-line publication and widespread distribution with the traditional benefits enjoyed by print media and serve to augment the purpose of the Code: the stability of zoological nomenclatural actions.

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Case 3309***Rosacea* Quoy & Gaimard, 1827: proposed conservation of usage (Cnidaria, Siphonophora); *Desmophyes annectens* Haeckel, 1888 and *Rosacea plicata* Bigelow, 1911: proposed conservation**

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Abstract. The purpose of this application is to conserve the names *Desmophyes annectens* Haeckel, 1888, under Article 23.9.3 of the Code, and *Rosacea plicata* Bigelow, 1911, under Article 23.9.5, for two widely distributed (but rare in the former case) species of calyophoran prayid siphonophores. *D. annectens* is a junior synonym of *Rosacea plicata* Quoy & Gaimard, 1827. Bigelow used the name *R. plicata* for a different taxon. The name *R. plicata* is in prevailing use for the species described by Bigelow and introduction of a new name for this species would cause nomenclatural confusion, as would use of the name *R. plicata* Quoy & Gaimard, 1827 for the species currently known as *D. annectens*. Conservation of the names *D. annectens* Haeckel, 1888 and *R. plicata* Bigelow, 1911 and of the usage of the generic name *Rosacea* Quoy & Gaimard, 1827 by the designation of *R. plicata* Bigelow, 1911 as the type species of *Rosacea* Quoy & Gaimard, 1827 is proposed.

Keywords. Nomenclature; taxonomy; Cnidaria; Siphonophora; PRAYIDAE; *Desmophyes*; *Rosacea*; *Desmophyes annectens*; *Rosacea plicata*.

1. Quoy & Gaimard (1827, pp. 176–177, pl. 4B, figs. 2–4) introduced the generic name *Rosacea* for two new species of prayid siphonophores, *R. ceutensis* (p. 176) and *R. plicata* (p. 177), from the Strait of Gibraltar, which they briefly figured and described. *R. ceutensis* has not been positively identified since. The specific name *R. plicata* was used again as valid only by Schneider (1896, p. 632; 1898, p. 78; 1899, p. 22, figs. 18–23), by Kawamura in two taxonomic reviews of Japanese siphonophores (1915, p. 319, pl. 7, figs. 6–8; 1954, p. 102), and by Margulis (1994) in a recent revision of the genus *Rosacea*. A number of synonyms of *R. plicata* Quoy & Gaimard, 1827 have been recognised. These nominal species include *Diphyes brajae* Vogt, 1851 (p. 140, figs. 130–131), (invalid under Article 23.9.1, not used as valid since 1899 = nomen oblitum), *Praya diphyes* K  lliker, 1853 (p. 33, pl. 9), (non Blainville, 1834), *P. diphyes* Vogt, 1854 (p. 99, pls. 16, figs. 1–2, pl. 17), (non Blainville, 1834), and *P. filiformis* Keferstein & Ehlers, 1860 (p. 260), 1861 (p. 20, pl. 5, figs. 8–11), (invalid =

Rhizophysa filiformis Chiaje, 1829, a junior primary homonym of *R. filiformis* Forskål, 1775). The name *P. diphys* auct. (non Blainville, 1834) has also been used for other prayid species.

2. Haeckel (1888a, p. 36) established the name *Desmophyes* for a genus with up to six swimming bells and included two nominal species without descriptions. Later the same year he established the species *D. annectens* with an extensive description and figures (Haeckel, 1888b, p. 170, pl. 30). Schneider (1896, p. 630) assigned Haeckel's species to the genus *Praya*. Chun (1897, p. 68, fig. 9) used the name *D. annectens* in a general review of siphonophore body plans, and reproduced Haeckel's figure (Haeckel, 1888b, pl. 30, fig. 1). *D. annectens* is a rare species and was not considered in detail again until Totton (1965, p. 128, pl. 22, figs. 4–6; pl. 24, figs. 1–9) included it in his monograph on siphonophores. He indirectly recognised that *D. annectens* was the same taxon as *Rosacea plicata* Quoy & Gaimard, 1827 by including the name as '*R. plicata*: Kawamura, 1915' in his synonymy and reproducing Kawamura's figures (Kawamura, 1915, pl. 7, figs. 6–8) of *R. plicata* Quoy & Gaimard (Totton, 1965, pl. 22, figs. 4–6). However, the name *D. annectens* has been used consistently for this species since 1965 (see Pugh, 1974, p. 39; Kirkpatrick & Pugh, 1984, p. 62; Margulis, 1987, p. 25; Pugh & Harbison, 1987, p. 86; Dallot et al., 1988, p. 197; Gibbons & Thibault-Botha, 2002, p. 803; and 17 additional references held by the Commission Secretariat).

3. Bigelow (1911a, pp. 341–343) identified material he collected in the Bay of Biscay as *Rosacea plicata* Quoy & Gaimard, 1827 and in the same year published an extensive description of similar material together with three excellent figures of specimens from the tropical east Pacific (Bigelow, 1911b, pp. 201–203, pl. 2, figs. 7–9). These figures have been used by many workers to identify this species. Bigelow's species is different from that of Quoy & Gaimard because the somatocyst is arranged differently, as pointed out by Totton (1965, p. 115) and Pugh & Harbison (1987, p. 86), and it is a common and well known prayid species (see Bigelow & Sears, 1937, p. 11; Totton, 1954, p. 88; 1965, p. 116; Stepanjants, 1967, p. 145; Daniel, 1974, p. 84; Xu & Zhang, 1978, p. 36; Alvarino, 1981, p. 401; Kirkpatrick & Pugh, 1984, p. 54; Pagès & Gili, 1992, p. 76; Pugh, 1999, p. 486; Gao et al., 2002, p. 86). To avoid future confusion, Totton (1965, p. 116) referred to Bigelow's species as '*R. plicata* sensu Bigelow, 1911' and treated it as a new species. However, the name is invalid, under Article 57.2 of the Code, as a junior primary homonym of *R. plicata* Quoy & Gaimard, 1827.

4. Pugh & Harbison (1987) reviewed all genera and species in the prayid subfamily PRAYINAE, noting (p. 86) that the original specimen (holotype) of *Rosacea plicata* Quoy & Gaimard, 1827 was no longer in existence, and therefore designated as the neotype a pair of nectophores from material described by Bigelow (1911a) from the Bay of Biscay. However, the specimens from which Pugh & Harbison (1987) designated their neotype are here recognised as syntypes and the neotype should now be identified as the lectotype of a then new nominal species *Rosacea plicata* Bigelow, 1911 (non Quoy & Gaimard, 1827). The lectotype is a pair of nectophores described by Bigelow (1911a) and held in the collections of The Natural History Museum, London, as BMNH Reg. No. 1939.6.10.1. The syntypes were collected by *H.M.S. Research* on 25-vii-1900 at 47°03'N, 7°55'W, from 300–0 fm (see Pugh & Harbison, 1987, p. 87).

5. Margulis (1994) revised the genus *Rosacea* basing her revision on specimens from her own South Pacific collections and from North Atlantic specimens loaned to her by P.R. Pugh. Contrary to prevailing usage Margulis synonymised *Desmophyes annectens* with *Rosacea plicata* Quoy & Gaimard, 1827 and moved *D. villafrancae* (Carré, 1969) and *D. haematogaster* Pugh, 1992 into the genus *Rosacea*. She created a new genus, *Neorosacea*, for *Rosacea plicata* 'sensu Bigelow 1911', and renamed the latter species *N. bigelowi*. This necessitated the transfer of four species from the genus *Rosacea* into the genus *Neorosacea* including *R. cymbiformis* (Chiaje, 1830), *R. flaccida* Biggs, Pugh & Carré, 1978, *R. limbata* Pugh & Youngbluth, 1988 and *R. repanda* Pugh & Youngbluth, 1988. Pugh (1999) rejected this revision in his review of South Atlantic siphonophores, and later added a new species *R. arabiana* to the genus *Rosacea* (Pugh, 2002, p. 171).

6. The names *Rosacea plicata* Bigelow, 1911 and *Desmophyes annectens* Haeckel, 1888 for the two species are well established in the literature (see paras. 2 and 3 above). Stability would not be maintained by adopting the changes introduced by Margulis (1994). Therefore, in the interests of nomenclatural stability we propose that *Rosacea plicata* Quoy & Gaimard, 1827 is suppressed for both the Principle of Priority and the Principle of Homonymy and that *Rosacea plicata* Bigelow, 1911 is designated as the type species of *Rosacea* Quoy & Gaimard, 1827.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power:
 - (a) to suppress the name *plicata* Quoy & Gaimard, 1827, as published in the binomen *Rosacea plicata*, for the purposes of both the Principle of Priority and the Principle of Homonymy;
 - (b) to set aside all previous fixations of type species for the nominal genus *Rosacea* Quoy & Gaimard, 1827 and to designate *Rosacea plicata* Bigelow, 1911 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Desmophyes* Haeckel, 1888 (gender: feminine), type species by monotypy *Desmophyes annectens* Haeckel, 1888;
 - (b) *Rosacea* Quoy & Gaimard, 1827 (gender: feminine), type species by designation in (1)(b) above *Rosacea plicata* Bigelow, 1911;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *annectens*, Haeckel, 1888, as published in the binomen *Desmophyes annectens* (specific name of the type species of *Desmophyes* Haeckel, 1888);
 - (b) *plicata*, Bigelow, 1911, as published in the binomen *Rosacea plicata* and defined by the lectotype cited in para. 4 above (specific name of the type species of *Rosacea* Quoy & Gaimard, 1827);
- (4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *plicata* Quoy & Gaimard, 1827 as published in the binomen *Rosacea plicata* and as suppressed in (1)(a) above.

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Case 3261

THEBINI Wenz, 1923, MONACHAINAE Wenz, 1930 (1904), and SPHINCTEROCHILIDAE Zilch, 1960 (1910): proposed conservation (Mollusca, Gastropoda)

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Abstract. The purpose of this application is to conserve the family-group names THEBINI Wenz, 1923, MONACHAINAE Wenz, 1930 (1904) and SPHINCTEROCHILIDAE Zilch, 1960 (1910) for several West Palearctic helicoid land snails. The family-group names involved have a complex nomenclatural history due to a misidentified type genus, a misidentified type species, homonymy and synonymy. Issues raised in the present application had been partly resolved in Opinion 431 by placing the names *Helicella*, *Monacha*, and *Theba* on the Official List, and the names *Euparypha*, *Jacosta*, and *Xerophila* on the Official Index. However, the consequences of these rulings on family-group names had not been addressed.

Keywords. Nomenclature; taxonomy; Pulmonata; THEBINI; MONACHAINAE; SPHINCTEROCHILIDAE; land snails; Palearctic.

1. *Theba* Risso, 1826 and THEBINI Wenz, 1923

1.1. Risso (1826, p. 73) established the name *Theba* for a genus of helicoid land snails based on a manuscript name by Leach (1820, *A synopsis of the Mollusca of Great Britain*, unpublished). Ten species were originally included, of which *Helix pisana* O.F. Müller, 1774 (p. 60) was subsequently designated as the type species by Gray (1847, p. 173) but not recognised until 1927 (Lindholm, 1927, p. 119). Leach's manuscript name was also published with the spelling '*Teba*' by Turton (1831, pp. 36–43) and by Beck (1847, p. 132) (see Giannuzzi-Savelli & Gentry, 1990, p. 263, on how Leach's names were subsequently made available by his contemporaries). Caziot (1910, pp. 84, 529) treated *Theba* Risso, 1826 as etymologically incorrect and used '*Teba* Leach, 1820' in the sense of the genus *Hygromia* Risso, 1826, but he did not designate a type species. After Caziot, use of the spelling '*Teba*' was discontinued. The name *Teba* was listed in Neave's *Nomenclator Zoologicus* as '(pro *The*- Risso, 1826) (Leach MS) Turton, 1831, . . .' and in Sherborn's *Index Animalium* it was attributed to 'H. Beck, 1846 (1847) . . .' without reference to Leach MS, and additionally to 'W.E. Leach, . . . 1847, . . . (non 1820, MS)'. The name '*Teba*' is an incorrect subsequent spelling and, therefore, an unavailable name under Article 33.3 of the Code.

1.2. The name *Theba* Risso, 1826 was in general use during the 19th century (see also para. 2 below). Moquin-Tandon (1855, p. 102) used it for species currently classified in the genus *Trochoidea* Brown, 1827 and *Cochlicella* Férussac, 1821 (and placed *H. pisana* in the genus *Heliomanes* Brown, 1844). Westerlund (1889, p. 71)

used it in the sense of *Monacha* Fitzinger, 1833 (and placed *H. pisana* in *Euparypha* Hartmann, 1843).

1.3. Pilsbry (1895, p. 265), in apparent ignorance of Gray's earlier type designation, designated *Helix cartusiana* O.F. Müller, 1774 (also an originally included species) as type species of *Theba*. Such was the magnitude of Pilsbry's reputation that this taxonomic concept was used for several decades.

1.4. Following the usage established by Westerlund (1889) and Pilsbry (1895), Wenz (1923, p. 381) introduced the family-group name THEBINI (as Thebea) as a substitute name for CARTHUSIANINI Kobelt, 1904 (based on *Carthusiana* Kobelt, 1871, type species by tautonymy *Helix carthusiana* [sic] O.F. Müller, 1774). This usage was followed by Hesse (1931, 1934, who cited 'Germain, 1929' as the author) but not subsequently. The family-group name THEBINI is a senior objective synonym of EUPARYPHINAE Perrot, 1939 (the type species of *Euparyphya* Hartmann, 1843, p. 204, *Helix pisana* O.F. Müller, 1774, is the valid type species of its type genus *Theba*) (see Schileyko (1972)). The genus name *Theba* is in prevailing use (see Gittenberger & Ripken, 1987). The name *Euparypha* was placed on the Official Index in Opinion 431 (*Opinions and Declarations rendered by the ICZN*, 14, p. 351). Lindholm (1927, p. 119) recognised that the first valid designation of a type species for *Theba* was by Gray (1847). From that time *Theba* has consistently been used for a genus including *Theba pisana* (O.F. Müller, 1774). *Theba* Risso, 1826 was placed on the Official List in Opinion 431 (*Opinions and Declarations rendered by the ICZN*, 14, p. 350) with *Helix pisana* O.F. Müller, 1774 as the type species. Thus the family-group name THEBINI Wenz, 1923 was based on an overlooked earlier type species fixation for the misidentified type genus. Therefore, we propose that the name THEBINI Wenz, 1923 is ruled not invalid by the discovery that the type genus was misidentified (i.e. interpreted in a sense other than that defined by its type species) and that fixation of the type species had been overlooked. Accordingly, this case is referred to the Commission for a ruling under Articles 65.2.1, 65.2.2 and 70.2 of the Code.

2. *Monacha* Fitzinger, 1833 and MONACHINAE Wenz, 1930

2.1. Fitzinger (1833, p. 95) established the genus *Monacha* with three included species, one of which, *Monacha carthusianella* Mihi (= *Helix cartusiana* O.F. Müller, 1774), was subsequently designated as the type species by Herrmannsen (1847 [17 July], p. 51). The generic name *Monacha* was placed on the Official List in Opinion 431 (*Opinions and Declarations rendered by the ICZN*, 14, p. 350) with *Helix cartusiana* O.F. Müller, 1774 as the type species by subsequent but invalid designation by Gray (1847 [November], p. 173). The type species designation by Herrmannsen is valid. We propose that the Official List be emended accordingly.

2.2. As a consequence of Lindholm's (1927) discovery of Gray's type species designation for *Theba* (see para. 1.1 above), Wenz (1930, p. 3027) introduced the substitute name MONACHINI (as Monachea) and abandoned the name THEBINI. This action was implicit under Articles 26–30 of the Rules then in force (1926) and correct under Article 23.3.5 of the current Code. Following Wenz, MONACHINI was used as the valid name of a tribe or a subfamily and is in current use. Nordsieck (1987, p. 31) noted that because MONACHINI was a replacement name for THEBINI, itself a replacement name for CARTHUSIANINI, it takes priority from 1904, the date of publication of the earlier name (= MONACHINI Wenz, 1930 (1904); see Article 40.2.1 and

Recommendation 40A of the Code). Nordsieck also pointed out that MONACHINAE Wenz is a homonym of MONACHINAE Gray, 1869, based on *Monachus* Fleming, 1822 (Mammalia). MONACHINAE / -INI Gray, 1869 is in current use for a subfamily and tribe of the family PHOCIDAE (see McKenna & Bell, 1997, p. 258). Therefore, the case must be referred to the Commission for a ruling under Article 55.3.1. Accordingly, we propose that homonymy between the two family-group names is removed by emending the stem of the junior name from MONACH- to MONACHA-, thereby changing the gastropod family-group name to MONACHAINAE / MONACHAINI with the mammalian family-group name remaining unchanged (see Article 29 and Recommendation 29A).

3. *Leucochroa* Beck, 1837 and LEUCOCHROIDAE Westerlund, 1886

3.1. Beck (1837, p. 16) established the name *Leucochroa* for a subgenus of *Helix* and included 15 species of which *Helix albella* Linnaeus, 1758 (p. 768) was validly designated as the type species by Herrmannsen (1847a, pp. 585–586), but Herrmannsen's action was not noticed until 1925. Martens (1860, p. 78) designated *Helix candidissima* Draparnaud, 1801 (p. 75), also an originally included species, as type species. Subsequent authors followed this use of the name *Leucochroa* for large, rounded, unbanded helicoids and Westerlund (1886, p. 82) established the family name LEUCOCHROIDAE for this taxonomic concept. Thus, the family-group name LEUCOCHROIDAE is a senior objective synonym of SPHINCTEROCHILIDAE Zilch, 1960 (see para. 6.4 below). However, despite Lindholm (1925, p. 164) and Pallary (1909, p. 12), use of the name LEUCOCHROIDAE was continued in that sense by Germain (1921, p. 99; 1931), Ihering (1929) and Hesse (1931, p. 105), but not subsequently.

3.2. Lindholm (1925, p. 164) realised that valid type species designations by Herrmannsen had been overlooked, and listed '*Helix albella* Drap. fide Herrmannsen, 1847' as the type species of *Leucochroa*. He then treated *Leucochroa* as an objective synonym of *Jacosta* Gray, 1821 (type species '*Helix albella* Draparnaud' [= *H. albella* Linnaeus, 1758] by monotypy). Forcart (1965, p. 255) found that the nominal species *H. albella* was composite, being based on a juvenile albino specimen of a species currently known as *Helicigona lapicida* (Linnaeus, 1758) and an indication to an illustration in Gualtieri (1742, pl. 3, fig. Q) currently recognised as *Theba pisana* (O.F. Müller, 1774). He selected the latter as the lectotype of *H. albella* Linnaeus, 1758, and *Leucochroa* then became an objective synonym of *Theba*. Forcart also treated '*Helix albella* Draparnaud, 1801' and '*Leucochroa* Lindholm, 1925, non Beck, 1837' as separate nomenclatural entities, which he considered to be synonyms of *Helix explanata* O.F. Müller, 1774 (currently *Xerosecta explanata*) and of *Xerosecta Monterosato*, 1892 respectively.

3.3. The family-group name LEUCOCHROIDAE Westerlund, 1886 was thus based on a misidentified type genus [Article 65.2.2], *Leucochroa* Beck, 1837, which itself was based on a misidentified type species [Article 70.2]. With this interpretation of the nominal genus *Leucochroa*, LEUCOCHROIDAE would be the same as THEBINI, but the family-group name LEUCOCHROIDAE has never been used in this sense. Accordingly, this case is referred to the Commission for a ruling under Article 65.2.

4. *Xerophila* Held, 1838 and XEROPHILIDAE Mörch, 1864

4.1. Held (1838, p. 913 [for date of publication, see Pilsbry 1934]) established the new genus *Xerophila* including 13 species of which *H. pisana* was subsequently

designated as the type species by Herrmannsen (1849, p. 712). *Xerophila* is a junior objective synonym of *Theba* and was placed on the Official Index in Opinion 431 (*Opinions and Declarations rendered by the ICZN*, 14, p. 351). The family-group name based on *Xerophila* was not then discussed.

4.2. Mörch (1864, p. 281) established the family XEROPHILIDAE (as Xerophilae). The type genus is *Xerophila* Held, 1838 (p. 913), by inference, but Mörch did not cite the name and it remains conjectural. Mörch included the genera *Jacosta* (with '*Teba* Leach' given as a synonym) and *Eulota* Hartmann, 1841 in this family. Authors who subsequently used XEROPHILINAE (as a subfamily) applied it in the sense of HELICELLINAE (Kobelt, 1904, pp. 67, 132; Wagner, 1927, p. 366). After the influential works of Hesse (1926) and Pilsbry (1939) use of XEROPHILIDAE / -INAE was discontinued and HELICELLIDAE / -INAE came into prevailing use.

5. *Euparypha* Hartmann, 1843 and EUPARYPHINAE Perrot, 1939

5.1. The monotypic genus *Euparypha* was introduced by Hartmann (1843, p. 204) for *Helix rhodostoma* Draparnaud, 1801, including *H. pisana* O.F. Müller, 1774 in synonymy. Based on his work on the caryology of *H. pisana*, Perrot (1939, p. 35) segregated the genus *Euparypha* and established the subfamily EUPARYPHINAE. Although *Euparypha* is a junior objective synonym of *Theba* and was placed on the Official Index in Opinion 431 (*Opinions and Declarations rendered by the ICZN*, 14, p. 351) the family-group name EUPARYPHINAE is in current use.

6. CALCARINIDAE Pallary, 1909, ALBEIDAE Pallary, 1910 and SPHINCTEROCHILIDAE Zilch, 1960

6.1. The nominal genus *Calcarina* was established by Moquin-Tandon (1848, p. 375) for *Helix candidissima* Draparnaud, 1801 and several additional species were questionably referred to it. *Calcarina* was treated as a synonym of *Leucochroa* following Martens's (1860, p. 78) invalid designation of *H. candidissima* as the type species of *Leucochroa* (see para. 3.1 above).

6.2. Pallary (1909, p. 12) recognised that the type species of *Leucochroa* Beck, 1837 was *H. albella* (see para. 3 above). He therefore abandoned the use of *Leucochroa* and adopted *Calcarina*, for which he established the new family CALCARINIDAE. Soon after, he (Pallary, 1910a, unpaginated addendum) realised that *Calcarina* Moquin-Tandon, 1848 was a junior homonym of *Calcarina* d'Orbigny, 1821 (Foraminifera) and proposed the substitute name *Albea*. In the 'additions and corrections' to his 1909 paper Pallary (1910b, p. 178) established the new family name ALBEIDAE.

6.3. Ancey (1887, p. 23) established the genus *Sphincterochila* with two included species, *Helix filia* Mousson, 1861 and *H. boissieri* Charpentier, 1847 (p. 133) for which Pilsbry (1895, p. 234) selected the latter as the type species.

6.4. Zilch (1960, p. 663) established the family-group name SPHINCTEROCHILINAE and treated *Albea* as a subgenus of *Sphincterochila* implicitly replacing ALBEIDAE because of the synonymy of its type genus (see para. 6.2 above). The name SPHINCTEROCHILIDAE is now in prevailing use. Forcart (1965, p. 124) elevated the nominal subfamily SPHINCTEROCHILINAE to family level and then to superfamily status (Forcart, 1972, p. 161) citing LEUCOCHROIDAE, CALCARINIDAE and ALBEIDAE in its synonymy. The family-group name SPHINCTEROCHILIDAE is maintained under Article 40.2 and takes the priority of the replaced name LEUCOCHROIDAE Westerlund,

1886 (= CALCARINIDAE (1909); = ALBEIDAE (1910) of which it is deemed to be the senior synonym (see Article 40.2.1)). Following Recommendation 40A the family-group name is to be cited as SPHINCTEROCHILIDAE Zilch, 1960 (1886).

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule:
 - (a) that the name THEBINI Wenz, 1923 is not invalid by reason of its type genus being misidentified and that fixation of the type species had been overlooked;
 - (b) that for the purposes of Article 29 of the Code the stem of the generic name *Monacha* Fitzinger, 1833 is *Monacha*-;
 - (c) that the generic name *Leucochroa* Beck, 1837, type species by subsequent designation by Herrmannsen (1847) *Helix albella* Linnaeus, 1758, is suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy;
 - (d) that the family-group name LEUCOCHROIDAE Westerlund, 1886, type genus *Leucochroa* Beck, 1837, type species *Helix candidissima* Draparnaud, 1801 (p. 75), is suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy, by reason of being based on a misidentified type genus, as suppressed in (1)(c) above, itself based on a misidentified type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Sphincterochila* Ancey, 1887 (gender: feminine), type species by subsequent designation by Pilsbry, 1895, *H. boissieri* Charpentier, 1847;
- (3) to emend the entry on the Official List of Generic Names in Zoology for the name *Monacha* Fitzinger, 1833 to record that *Helix cartusiana* O.F. Müller, 1774 is the type species by subsequent designation by Herrmannsen (1847 [17 July], p. 51) and that the stem of *Monacha* is *Monacha*-, as ruled in (1)(b) above;
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) THEBINI Wenz, 1923, type genus *Theba* Risso, 1826, type species by subsequent designation by Gray, 1847, *Helix pisana* O.F. Müller, 1774), with the endorsement that it is not to take the priority of CARTHUSIANINI Kobelt, 1904, not invalid by the ruling in (1)(a) above;
 - (b) MONACHAINI Wenz, 1930, type genus *Monacha* Fitzinger, 1833 (type species by subsequent designation by Herrmannsen, 1847, *Helix cartusiana* O.F. Müller, 1774), with the endorsement that it is to take the priority of CARTHUSIANINI Kobelt, 1904, and is to be cited MONACHAINI Wenz, 1930 (1904);
 - (c) SPHINCTEROCHILIDAE Zilch, 1960 (1886), type genus *Sphincterochila* Ancey, 1887 (type species by subsequent designation by Pilsbry, 1895, *H. boissieri* Charpentier, 1847), with the endorsement that it is to take the priority of LEUCOCHROIDAE Westerlund, 1886;
- (5) to place on the Official Index of Generic Names in Zoology the following names:
 - (a) *Teba* Turton, 1831 (an incorrect subsequent spelling of *Theba* Risso, 1826);

- (b) *Teba* Beck, 1847 (an incorrect subsequent spelling of *Theba* Risso, 1826);
- (c) *Leucochroa* Beck, 1837 (an objective synonym of *Theba* Risso, 1826 and suppressed in (1)(c) above);
- (d) *Carthusiana* Kobelt, 1871 (an objective synonym of *Monacha* Fitzinger, 1833);
- (6) to place on the Official Index of Family-Group Names in Zoology the following names:
 - (a) XEROPHILIDAE Mörch, 1864 (based on a generic name placed on the Official Index by Opinion 431);
 - (b) LEUCOCHROIDAE Westerlund, 1886 (based on a misidentified type genus suppressed in (1)(c) above);
 - (c) CARTHUSIANINI Kobelt, 1904 (replaced by MONACHAINAE under Article 40.2 and based on a genus placed on the official Index in (5)(d) above);
 - (d) CALCARINIDAE Pallary, 1909 (based on a generic name which is a junior homonym);
 - (e) MONACHINAE Wenz, 1930 (an incorrect original spelling of MONACHAINAE);
 - (f) EUPARYPHINAE Perrot, 1939 (based on a generic name placed on the Official Index by Opinion 431).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3311

***Bathyporeia elegans* Watkin, 1938 (Crustacea, Amphipoda): proposed conservation**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the current usage of the widely used specific name *Bathyporeia elegans* Watkin 1938, for an amphipod, which is threatened by the senior homonym *Bathyporeia elegans* Crawford, 1937.

Keywords. Nomenclature; taxonomy; Crustacea; Amphipoda; PONTOPOREIIDAE: *Bathyporeia elegans*.

1. In the 1930's, E.E. Watkin was working on a revision of the genus *Bathyporeia* and discovered a new species, which he intended to describe as *Bathyporeia elegans*. He apparently discussed this discovery with his colleague G.I. Crawford, who then introduced the name *Bathyporeia elegans* in an ecological paper (Crawford, 1937, p. 639). His puzzling account runs as follows: '*Bathyporeia elegans* Sars is a name applied to a slender form of *B. pelagica* with less well-developed eyes. The specimens of this genus from the finer sand of Cawsand Bay were of this form, but it is doubtful if it is a distinct species'.

2. G.O. Sars never described *Bathyporeia elegans* but did describe *Bathyporeia gracilis* Sars, 1891, which is a rare, valid species (Sars, 1891; Vader, 1970; d'Udekem d'Acoz, 2004).

3. One year after the publication of Crawford's paper, Watkin (1938, p. 222) published a conventional description of *Bathyporeia elegans*, as '*B. elegans*, nom. nov.', the term 'nom. nov.' alluding to the fact that the name *Bathyporeia pelagica* (Bate, 1857) had often been erroneously applied to Watkin's species.

4. Watkin (1938, p. 222, footnote) referred to Crawford's paper, as follows: 'Mr. G. I. Crawford desires me to state that his reference to *B. elegans*, this *Journal* Vol. XXI, p. 639, line 4, is an error and should be read *B. gracilis*.' However, Watkin (1938) apparently did not accept Crawford's identification because on page 225, he indicated '*B. elegans* Crawford, 1937a, p. 639' in the synonymy of *Bathyporeia tenuipes* Meinert, 1877, and gave no comments in his account of *B. gracilis* Sars, 1891. Crawford's (1937) morphological account is ambiguous, and could agree either with *B. gracilis* Sars, 1891 or with *B. tenuipes* Meinert, 1877, but this uncertainty has no nomenclatural consequences. The important point is that *Bathyporeia elegans* Crawford, 1937 is not the same species as *B. elegans* Watkin, 1938.

5. The new species of Watkin (1938) is common. From 1938 onwards, there has been universal acceptance of Watkin's name, which has been used in a large number of publications in various languages, for example Enckell (1980), Gurjanova (1951),

Lincoln (1979), Schellenberg (1942) and Toulmond (1966). An additional list of 45 references is held by the Commission Secretariat. Crawford's name *Bathyporeia elegans* has not been used, to our knowledge, since its first publication.

6. Crawford (1937), who must have been aware of the (then unpublished) name *Bathyporeia elegans* Watkin, clearly intended to write *Bathyporeia gracilis* Sars, but as a lapsus used the name *elegans* instead of *gracilis*, resulting in the combination '*Bathyporeia elegans* Crawford', which is an available name and a senior homonym of *B. elegans* Watkin. The copy of Crawford's paper (1937, p. 639) in the General Library of the Natural History Museum, London, contains the following handwritten marginal note alongside line 4 in which the word *elegans* has been crossed out: '*gracilis* / (error on my part GIC)'.

7. d'Udekem d'Acoz (2004, p. 33, figs. 4–8) designated and figured as lectotype of *Bathyporeia elegans* Watkin a female specimen, no. ZMO F2656 in the Zoologisk Museum i Oslo from Ognebukt, Jaederen, Southern Norway.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the specific name *elegans* Crawford, 1937, as published in the binomen *Bathyporeia elegans*, for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *elegans* Watkin, 1938, as published in the binomen *Bathyporeia elegans* and as defined by the lectotype designated by d'Udekem d'Acoz (2004);
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *elegans* Crawford, 1937, as published in the binomen *Bathyporeia elegans* and as suppressed in (1) above.

Acknowledgements

We are very grateful to Prof Sandro Minelli (University of Padova) and Dr Hans Georg Andres (University of Hamburg) for helpful discussions on the authorship of *Bathyporeia elegans*.

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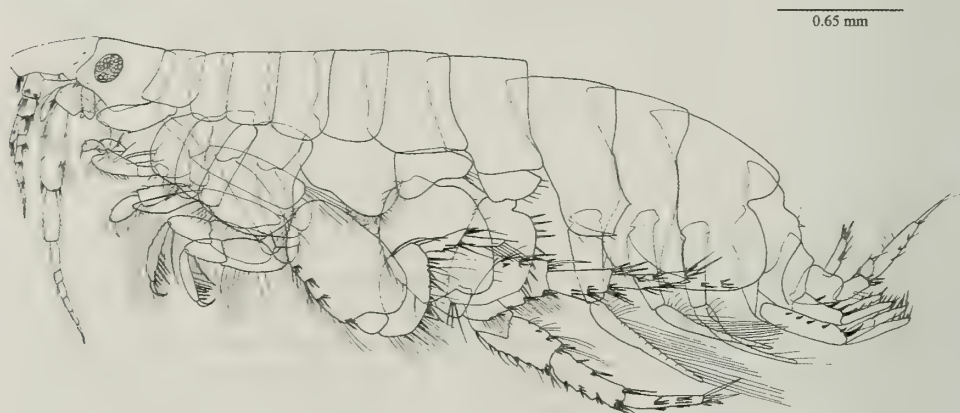
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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).



Bathyporeia elegans Watkin, 1938

Case 3306

***Drosophila elegans* Bock & Wheeler, 1972 (Insecta, Diptera):
proposed conservation of the specific name**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the specific name *Drosophila elegans* Bock & Wheeler, 1972, a species of fruitfly important in phylogenetic studies. The name is threatened by a senior homonym *Drosophila elegans* Statz, 1940 established for a poorly preserved Oligocene fossil and never since used as valid. It is proposed that the name of the fossil be suppressed and replaced with the substitute name *Drosophila statzi*.

Keywords. Nomenclature; taxonomy; Diptera; *Drosophila elegans*; *Drosophila statzi*; fruitflies; phylogenetic studies.

1. The specific name *Drosophila elegans* was established by Statz (1940, p. 152, pl. 22, fig. 46, pl. 27, fig. 91) with a short description based on a single, poorly preserved specimen from Upper Oligocene strata near Rott, Germany. The generic name was written as '*Drosophila*', indicating the uncertain interpretation of the fossil. The accompanying illustrations do not show useful characters for species identification and could apply to hundreds of known *Drosophila* species. Despite the fact that Statz's publication is an important contribution to the study of fossil Diptera, the name *D. elegans* Statz has never been used in any phylogenetic study. Statz's publication was included in *Zoological Record*, vol. 77 for 1940, on p. 75 and *Drosophila elegans* was listed on p. 255. The first subsequent publication containing the name *D. elegans* Statz was Evenhuis (1994, p. 444) in a catalogue of fossil Diptera.

2. Bock & Wheeler (1972, p. 28) published the name *Drosophila elegans* for a different taxon with a description giving characters of the external and genital morphology and chromosomes as well as its position within the new *elegans* species-subgroup of the *melanogaster* species-group of the large and important genus *Drosophila* Fallén, 1823. The holotype and additional specimens from Baguio City, Luzon, Philippines, were originally deposited in the collection of the Genetics Foundation, University of Texas at Austin, Texas, U.S.A., and are now in the American Museum of Natural History, New York, U.S.A. This species is widespread in southern Asia.

3. The name *Drosophila elegans* with authorship attributed to Bock & Wheeler is mentioned in a large number of publications (e.g. Bock, 1980; Kopp & True, 2002; Schawaroch, 2002; a list of 43 additional publications is held by the Commission Secretariat). These publications predominantly deal with the phylogenetic analysis of the *Drosophila melanogaster* species-group, one of the most intensively studied *Drosophila* species-groups in recent years.

4. Replacing the name of the junior primary homonym, *Drosophila elegans* Bock & Wheeler, 1972, would produce confusion within a well-established phylogeny. Therefore, we propose suppression of the name of the senior homonym, *Drosophila elegans* Statz, 1940; subject to the Commission approving this, we hereby propose the substitute name *Drosophila statzi*.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *elegans* Statz, 1940, as published in the binomen *Drosophila elegans*, for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place the following names on the Official List of Specific Names in Zoology:
 - (a) *elegans* Bock & Wheeler, 1972, as published in the binomen *Drosophila elegans*;
 - (b) *statzi* Ashburner & Bächli, 2004, as published in the binomen *Drosophila statzi* (substitute name for *Drosophila elegans* Statz, 1940);
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *elegans* Statz, 1940, as published in the binomen *Drosophila elegans* and suppressed in (1) above.

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Acknowledgement of receipt of this application was published in BZN **61**: 2.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Comment on the proposal to emend the spelling of CLIONIDAE d'Orbigny, 1851 (Porifera, Hadromerida) to CLIONAIDAE to remove homonymy with CLIONIDAE Rafinesque, 1815 (Mollusca)
(Case 3211; see BZN 60: 99–102)

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We are pleased to see that the homonymy between CLIONIDAE Rafinesque, 1815 (Mollusca, Pteropoda, Gymnosomata) and CLIONIDAE d'Orbigny, 1851 (Porifera, Hadromerida) has finally been raised. It would have been resolved a long time ago were it not for the ambiguity over Rafinesque's (1815) use of '*Clione* R. *Clio* Brown' for the type genus of his subfamily 'Clionidia'. Nonetheless, we support the proposal by Bouchet & Rützler as a logical and practical solution by changing the name of the junior homonym to CLIONAIDAE. This change will cause no disruption for molluscan specialists and minimal disruption for sponge specialists, particularly because the change has already been foreshadowed in the influential book *Systema Porifera*.

We believe that the proposal by Bouchet & Rützler does not fully cover the present case. We therefore offer the following additional data for consideration by the Commission so as to achieve closure of all aspects of this application.

Our analysis of the molluscan genus-group taxa proposed by Rafinesque in his *Analyse* (1815, pp. 139–148; for an English translation see: Cain, 1990, pp. 176–180) (for a list see: Iredale, 1911, p. 262) indicates each and every one to be a new or replacement name, not taken over from previous authors. There is no reason whatsoever to make an exception in the present instance, or to accept at face value '*Clione* R.' as the same as the earlier introduction by Pallas (1774) of a genus name of the same spelling.

The name *Clione* Rafinesque, 1815, introduced as 'G.6. *Clione* R. *Clio* Brown', is indeed a junior homonym of *Clione* Pallas, 1774. As such it is unavailable as the type genus of a family name (see Article 39). Therefore, a family-group name 'Clionidia Rafinesque, 1815' has neither validity nor standing, and the next available name must be brought into use.

As pointed out by Bouchet & Rützler in their application, the similarity of the names *Clio* Linnaeus, 1767 (Mollusca, Thecosomata) and *Clione* Pallas, 1774 (Mollusca, Gymnosomata) has meant that usage of both has been extremely confused. Gray (1840, p. 151), to whom the family name has been attributed by several authors, used CLIONIDAE, however the only included genus was *Clio* Linnaeus, 1767, which cannot be construed as the type genus. Unequivocal usage of a family-group name based solely upon *Clione* Pallas, 1774 appears to rest with Gray (1847, p. 204), as CLIONIDAE, thus fortunately retaining priority of this family name in

Mollusca. Gray (1850, p. 124) later used the spelling CLIONEIDAE and yet another variant, CLIONACEA, was employed by Philippi (1853, p. 295).

The name CLIOIDAE, currently in use for the thecosomatous family of molluscs based on *Clio* Linnaeus, 1767, is incorrectly formed from the Greek root. Woodward (1854, p. 208) was the first to use the correct spelling CLIIDAE, but 26 years earlier Menke (1828, p. 5) had introduced a family taxon CLIODINAE based upon the type genus '*Clio*, Br.' = *Clio* Linnaeus, 1767. Although the suffix -INAE is incorrect for a family name (Article 29.2), the name is still available. Thus, with a corrected suffix and original authorship and date (Article 11.7.1.3), the family name is CLIIDAE Menke, 1828 and henceforth CLIIDAE Menke, 1828 should be used as the correct name for the family of thecosomes, not CLIOIDAE. Menke (1830, p. 9) also spelled the name CLIOIDAE, but that is an incorrect subsequent spelling of CLIIDAE.

Some years earlier, Férussac (1822, p. xxv) introduced the vernacular family-group name 'Les Clios', the included genera being *Clio* Linnaeus, 1767 and *Clione* Pallas, 1774. However, his tabular key qualification 'c) Sans test' indicates that he was in fact referring solely to the gymnosome *Clione* Pallas, 1774.

The International Commission on Zoological Nomenclature is accordingly asked to modify and extend the points of the original application by Bouchet & Rützler as follows:

- (1) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) CLIONIDAE Gray, 1847, type genus *Clione* Pallas, 1774 (Mollusca);
 - (b) CLIIDAE Menke, 1828, type genus *Clio* Linnaeus, 1767 (Mollusca);
- (2) to place on the Official Index of Rejected and Invalid Generic Names in Zoology, the name *Clione* Rafinesque, 1815 (a junior homonym of *Clione* Pallas, 1774, placed on the Official List of Generic Names in Zoology in (2)(b) in the application) (Mollusca);
- (3) to place on the Official List of Rejected and Invalid Family-Group Names in Zoology the names:
 - (a) CLIONIDIA Rafinesque, 1815 (an invalid name based upon the junior homonym *Clione* Rafinesque, 1815, non *Clione* Pallas, 1774, placed on the Official List of Generic Names in Zoology in para. 7 (2)(b) in the application) (Mollusca);
 - (b) CLIOEIDAE Gray, 1850 (an incorrect subsequent spelling of CLIONIDAE in (1)(a) above) (Mollusca);
 - (c) CLIONACEA Philippi, 1853 (an incorrect subsequent spelling of CLIONIDAE in (1)(a) above) (Mollusca);
 - (d) CLIODINAE Menke, 1828 (an incorrect original spelling of CLIIDAE in (1)(b) above) (Mollusca);
 - (e) CLIOIDEA Menke, 1830 (an incorrect subsequent spelling of CLIIDAE in (1)(b) above) (Mollusca);
 - (f) CLIOIDAE van der Spoel, 1967 (an incorrect subsequent spelling of CLIIDAE in (1)(b) above) (Mollusca).

Additional references

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Comment on the proposed conservation of prevailing usage of TERMOPSIDAE
Holmgren, 1911, *Termopsis* Heer, 1849 and *Miotermes* Rosen, 1913 (Insecta, Isoptera)
 (Case 3244; see BZN 60: 119–123, 303)

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1. This comment touches on two points arising from our application (BZN 60: 119–123) relating to the proposed conservation of the prevailing usage of TERMOPSIDAE Holmgren, 1911, *Termopsis* Heer, 1849 and *Miotermes* Rosen, 1913.

2. First, Dr Alonso-Zarazaga (BZN 60: 303) has provided points of clarification on the proposed conservation of usage of the three names concerned. He has correctly noted that in our application the gender of *Termopsis* was accidentally and quite erroneously labeled as masculine, when it is indeed feminine. His emendations to our request are valued and we wholeheartedly recommend that they be adopted.

3. Secondly, we have recently discovered that in a short note on termite classification Holmgren (1910, p. 285) made available the subfamily name STOLOTERMITINAE for *Stolotermes* Hagen, 1858 (p. 105), type species by monotypy *Hodotermes* (*Stolotermes*) *brunneicornis* Hagen, 1858 (p. 105). Thus the name STOLOTERMITINAE has priority by one year over the name TERMOPSIDAE, which Holmgren proposed as new in his 1911 monograph (p. 35). Accordingly, we propose that, in addition to the proposals put forward in BZN 60: 121, TERMOPSIDAE be given precedence over STOLOTERMITINAE whenever their type genera are placed in the same family-group taxon.

4. Our full proposal therefore reads as follows:

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

(a) to rule that the family-group name TERMOPSIDAE Holmgren, 1911 and other family-group names based on *Termopsis* Heer, 1849 are to be given

- precedence over STOLOTERMITINAE Holmgren, 1910 and other family-group names based on *Stolotermes* Hagen, 1858 whenever their type genera are placed in the same family-group taxon;
- (b) to set aside all previous fixations of type species for the nominal genus *Termopsis* Heer, 1849 and to designate *Termopsis bremii* Heer, 1849 as type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
- (a) *Termopsis* Heer, 1849 (gender: feminine), type species by designation in (1)(b) above *Termopsis bremii* Heer, 1849;
- (b) *Miotermes* Rosen, 1913 (gender: masculine), type species by original designation *Termopsis procera* Heer, 1849;
- (c) *Stolotermes* Hagen, 1858 (gender: masculine), type species by monotypy *Hodotermes (Stolotermes) brunneicornis* Hagen, 1858;
- (3) to place on the Official List of Specific Names in Zoology the following names:
- (a) *bremii* Heer, 1849, as published in the binomen *Termopsis bremii* (specific name of the type species of *Termopsis* Heer, 1849);
- (b) *procera* Heer, 1849, as published in the binomen *Termopsis procera* (specific name of the type species of *Miotermes* Rosen, 1913);
- (c) *brunneicornis* Hagen, 1858, as published in the binomen *Hodotermes brunneicornis* (specific name of the type species of *Stolotermes* Hagen, 1858);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
- (a) TERMOPSIDAE Holmgren, 1911 (type genus *Termopsis* Heer, 1849), with the endorsement that it and other family-group names based on *Termopsis* are to be given precedence over STOLOTERMITINAE Holmgren, 1910 and other family-group names based on *Stolotermes* Hagen, 1858 whenever their type genera are placed in the same family-group taxon;
- (b) STOLOTERMITINAE Holmgren, 1910 (type genus *Stolotermes* Hagen, 1858), with the endorsement that it and other family-group names based on *Stolotermes* are not to be given priority over TERMOPSIDAE Holmgren, 1911 and other family-group names based on *Termopsis* Heer, 1849 whenever their type genera are placed in the same family-group taxon.

Acknowledgements

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Additional reference

Holmgren, N. 1910. Das System der Termiten. *Zoologischer Anzeiger*, **35**: 284–286.

Comments on the proposed precedence of NEMONYCHIDAE Bedel, November 1882, over CIMBERIDIDAE Gozis, March 1882, and the proposed conservation of usage of *Cimberis* Gozis, 1881 (Insecta, Coleoptera)
(Case 3093; see BZN 60: 275–280)

(1) Analía A. Lanteri

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I write in support of the proposal by Christopher Lyal and Miguel Alonso-Zarazaga regarding the conservation of the family name NEMONYCHIDAE Bedel, November 1882 by giving it precedence over CIMBERIDIDAE Gozis, March 1882. Without any doubt the proposed conservation of the name will help the stability of weevil nomenclature. I have carefully read Case 3093 and I consider that the proposal is well justified.

(2) Antonio Velázquez de Castro

Departamento de Biología Animal, Facultad de Biología, Universidad Complutense de Madrid, Spain

I have read Case 3093 concerning NEMONYCHIDAE and I write in support of the point of view of the authors. I have been working with CURCULIONOIDEA for 20 years and I agree with the opinion of the authors.

(3) Marek Wanat

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I support the proposals by Lyal & Alonso-Zarazaga. The situation concerning the family name NEMONYCHIDAE is long-known and one of the most complicated nomenclatural problems involving family-group names in Coleoptera. I think that these proposals provide the best solution for the conservation of NEMONYCHIDAE as the valid name for this weevil family.

Conservation of the current usage of *Cimberis* Gozis, 1881 and the designation of *Rhinomacer attelaboides* Fabricius, 1787 as its type species would best serve stability of the nomenclature in this group.

Comment on the proposed precedence of *Bolboceras* Kirby, 1819 (July) (Insecta, Coleoptera) over *Odonteus* Samouelle, 1819 (June)
(Case 3097; see BZN 59: 246–248, 280–281; 60: 303–311; 61: 43–45, 110–114)

Ales Smetana

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Before the manuscript of Case 3097 was submitted for publication, I was given by the junior author (Howden) the opportunity to comment on it. I pointed out a

number of inaccuracies and errors that actually made the Case unacceptable for consideration. I offered to discuss the matter further, but was never approached.

The authors demonstrated either a remarkable ignorance of nomenclatural principles, or more likely chose to manipulate and / or circumvent them by presenting incorrect evidence in their crusade against *Odonteus*.

My criticisms are as follows (in the sequence as the matter appeared in the text of the original application):

1. The type species of *Odonteus* is *Scarabaeus mobilicornis* Fabricius, 1775, not *Scarabaeus mobilicornis* Marsham, 1802. There is no '*Scarabaeus mobilicornis* Marsham, 1802'. Marsham's usage is a subsequent reference to *Scarabaeus mobilicornis* Fabricius, 1775, since Marsham clearly cited Fabricius as the author. To state that *Scarabaeus mobilicornis* Marsham, 1802 'is a junior primary homonym' of *Scarabaeus mobilicornis* Fabricius, 1775 is therefore an incorrect, misleading statement. Consequently, paragraphs 2(b) and 3(b) in the application (BZN 59: 247) are particularly unacceptable.

2. *Odontaeus* Dejean, 1821 is undoubtedly an incorrect subsequent spelling of *Odonteus* Samouelle, 1819, as was correctly pointed out by Krell et al. (BZN 60: 304). The argument by Jameson & Howden (BZN 61: 44) that *Odontaeus* Dejean, 1821 represents a different taxon because Dejean included, in addition to the type species, several additional previously described species, is difficult to comprehend and is erroneous. Since when does a monotypic genus become a different taxon when additional species are subsequently added? The statement that 'Samouelle (1819) attributed *Odonteus* to Köppe, whereas Dejean (1821) attributed *Odontaeus* to Megerle' is insignificant and misleading. The act of publication of *Odonteus* / *Odontaeus* was clearly done by Samouelle and by Dejean. Neither Köppe nor Megerle had anything to do with it. At the time (early 19th century) it was often customary to mention the names of collectors / dealers from whom materials were obtained. I cannot help feeling that these arguments, as well as many other statements, were used by the authors in an attempt to introduce into the case confusion and instability which in fact do not exist. The fact that Cartwright (1953, p. 96) synonymized *Odontaeus* Dejean with *Bolboceras* Kirby is irrelevant and the act was invalid anyway.

3. The statement that 'the name *Odonteus* was not used after initial publication until . . . Krell (1990)' is incorrect and misleading, as already pointed out by Krell et al. (BZN 60: 304). It was based on the erroneous concept that *Odontaeus* Dejean, 1821 is a taxon different from *Odonteus* Samouelle (see para. 2 above). I fully agree with the comments by Krell et al. (BZN 60: 304) who documented the established and frequent use of *Odonteus* in Europe in taxonomic, faunistic and conservation literature in a long list of references. The validity of this stands and is not affected by the attempt by Jameson & Howden (BZN 61: 44) to discredit most of the references given by Krell et al. (BZN 60: 304) by using Article 23.9.6 incorrectly.

4. The usage of *Odonteus* Samouelle, 1819 does not seriously cause 'further nomenclatural confusion due to its homonymy with *Odonteus* Agassiz, 1838'. The name *Odonteus* Agassiz, 1838 (Pisces), conveniently not mentioned by Jameson & Howden (BZN 61: 43), was given the replacement name *Odonteobolca* by Krell in 1991.

5. In the dispute about the type species of *Bolboceras* Kirby, 1819, Jameson & Howden (BZN 60: 304) stated that 'Curtis (1829, p. 259) unequivocally established the type species of *Bolboceras* Kirby as *Scarabaeus mobilicornis* Fabricius'. Curtis's designation of '*Scarabaeus mobilicornis* Fabricius' was an invalid act because *Scarabaeus mobilicornis* Fabricius was not one of the originally included species. Krell et al. (BZN 60: 307) were, therefore, correct in requesting that the Commission designate *Scarabaeus quadridens* Fabricius, 1781 as the type species of *Bolboceras* Kirby, 1819, since it is one of the three originally included species ('*quadridens* Linn.', '*cephus* and *australasiae*') and the species upon which Kirby erected the genus *Bolboceras*.

6. The reference for Kirby (1819) given in Jameson & Howden (BZN 59: 248) is not quite correct. They were, in fact, referring to the article (XXVIII) immediately following the article 'A century of insects.....(XXVII)' given in their references. The correct reference for Kirby (1819) is given below.

In summary, due to the numerous erroneous and misleading statements in the application, as well as in the subsequent comments by Jameson & Howden (BZN 61: 43–45), some of which were already noted by Krell et al. (BZN 60: 303), I seriously question the validity of Case 3097. Therefore, I strongly oppose Jameson & Howden's application to give *Bolboceras* Kirby, 1819 (July) precedence over *Odonteus* Samouelle, 1819 (June) and fully support the alternative proposals to the Commission by Krell et al. (BZN 60: 307).

Additional references

Kirby W. 1819. XXVIII. Description of several new species of insects collected in New Holland by Robert Brown. Esq. F.R.S. Lib. Linn. Soc. *Transactions of the Linnean Society of London*, 12: 454–478.

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Comments on the proposed conservation of the specific name of *Macropodus concolor* Ahl, 1937 (Osteichthyes, Perciformes)

(Case 3255; see BZN 60: 206–207; 61: 114–116)

(1) Hans-Joachim Paepke

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In response to the comment by Kottelat et al. (BZN 61: 114–116), I and the authors of the application can only hope that the Commission does not follow their recommendation to reject the proposals. The application to conserve the specific name of *Macropodus concolor* Ahl, 1937 was correctly prepared and contained good arguments. We hope that the Commission will approve the proposals published in BZN 60: 207.

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In our review of the genus *Macropodus*, we needed to clarify the nomenclature of the included species. We followed the Code. The Commission has to decide if it sticks to the rules of the Code or accepts the view of the petitioners who try to hide that earlier authors (Vierke, 1986; Paepke, 1994) ignored the following articles and incorrectly applied the nomen oblitum regulations.

Macropodus spechti Schreitmüller, 1936 was described before *M. concolor* Schreitmüller, 1936 or *M. concolor* Ahl, 1937 and is therefore the oldest available name applied to this fish species. All names are based on the same material. Schreitmüller (1936b) himself suggested giving priority to *M. concolor*, which is totally irrelevant to the Code.

Article 23.9 cannot be applied because *Macropodus spechti* was established in 1936 and was therefore used as the valid name after 1899.

The authors stated that *Macropodus spechti* was a forgotten name. The nomen oblitum regulation was only valid between 6 Nov 1961 and 1 Jan 1973 (Article 23.12). The first author who stated that *M. spechti* is a nomen oblitum was Vierke (1986), followed by Paepke (1994). Both ignored the Code in declaring that *M. spechti* is a nomen oblitum. These works are well known to the small German aquarist community interested in this species (to which the petitioners belong) and it is hard to understand why a name should be forgotten if printed in books available for 16 and eight years respectively.

We note that in a very short time span the name *Macropodus spechti* became known and accepted in this small circle and is now taking over. A Google search on 13 March 2004 for *M. spechti* yielded 84 occurrences for the 'new unknown name', against only 467 for the 'old well established name'. This is clear evidence that the change of name is not creating a problem and was widely known and accepted within less than two years.

Comments on the proposed conservation of usage of the specific name *Palaeortyx phasianoides* Milne-Edwards, 1869 (Aves, Galliformes) by the designation of a neotype

(Case 3266; see BZN 60: 211–214; 61: 47–48, 117–119)

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1. In reply to the comment by Mlíkovský (BZN 61: 117–119), we write in support of our application (BZN 60: 211–214) proposing the designation of the scapula (MNHN Av 2895), one of the two syntypes of *Palaeortyx phasianoides* Milne-Edwards, 1869, as the neotype. Mlíkovský (2000), not following Recommendation 74A of the Code, had chosen the other syntype as the lectotype, a humerus (MNHN Av 2896) which had already been excluded from *P. phasianoides* by Ballmann (1969b,

p. 31) (see para. 3 of the application). Mlíkovský's argument, that the humerus is more diagnostic than the scapula, is not in accord with the fact that the syntype humerus (MNHN Av 2896) lacks its proximal and distal ends. In addition he (Mlíkovský, 2000, p. 93) selected the lectotype in the same publication in which he had identified it as a pathological specimen of the anatid *Mionetta blanchardi* (Milne-Edwards, 1863) thereby putting the well known phasianid species *P. phasianoides* in synonymy with the anatid species *M. blanchardi*. We (BZN 60: 213; in press) also recently found that the syntype humerus (MNHN Av 2896) is not a pathological specimen of *M. blanchardi* but belongs to *Ameripodius alexis* Mourer-Chauviré, 2000, a galliform (family QUERCYMEGAPODIIDAE). We proposed the designation of the syntype scapula (MNHN Av 2895) as the neotype for *P. phasianoides* because it was clearly identified as aphasianid (see Göhlich & Mourer-Chauviré, in press).

2. In contrast to the comment by Mlíkovský, that the scapula cannot be identified within the Galliformes because it is less diagnostic and that 'Göhlich & Mourer-Chauviré did not even try to identify the scapula fragment', we (Göhlich & Mourer-Chauviré, in press) described several morphologic characters on which the syntype scapula (MNHN Av 2895) can clearly be identified as a phasianid and with which *P. phasianoides* can be separated from several other fossil and recent galliforms, such as *Palaeocryptonyx* and *Coturnix*.

3. Direct comparisons by Göhlich & Mourer-Chauviré of the syntype humerus (MNHN Av 2896) with the holotype and paratype material of *A. alexis*, with other humeri from *P. phasianoides* from the type locality and with *M. blanchardi*, resulted in the identification of the syntype humerus as belonging to *A. alexis*. The syntype humerus shaft (MNHN Av 2896) can be identified as *A. alexis* by means of the strong longitudinal crest on its caudal surface of the shaft, and therefore is not an unsupported observation as indicated by Mlíkovský in his comment.

4. Mlíkovský also incorrectly argued that Mourer-Chauviré (2000, p. 481), when describing *A. alexis*, concluded that the syntype humerus (MNHN Av 2896) was not identical with *A. alexis*. This statement runs counter to facts! Mourer-Chauviré (2000) did not even mention the syntype humerus (MNHN Av 2896) of *P. phasianoides*. Mourer-Chauviré (2000, p. 481) stated that the 'four different species of the genus *Palaeortyx* . . . are typical phasianids, whereas the series of bones attributed to *Ameripodius* is quite distinct from the phasianids'. When arguing that *Ameripodius* differs from *P. phasianoides* it was not necessary to give a new definition of *P. phasianoides* because Ballmann (1969b) had already excluded the syntype humerus (MNHN Av 2896) from *P. phasianoides*.

5. Göhlich & Mourer-Chauviré (BZN 60: 211–214) cited several references which support the interpretation that *P. phasianoides* is a universally accepted taxon always used in the sense of a galliform. In his comment Mlíkovský described the publications of Lydekker (1891), Lambrecht (1933), Brodkorb (1967) and Bocheński (1997) as 'simple' catalogues. In fact, Lydekker (1891), Lambrecht (1933) and Brodkorb (1967) are publications in which several new avian taxa are described and especially in the last the systematics and taxonomy of galliformes were critically revised. Therefore, these publications cannot be considered as 'simple' catalogues.

6. Mlíkovský mentioned that Göhlich & Mourer-Chauviré also overlooked the fact that the names *Palaeortyx longipes* Milne-Edwards, 1869 and *Palaeocryptonyx gaillardi* Ennouchi, 1930 have been applied to *P. phasianoides* (Mlíkovský, 2002,

pp. 154–155). We have not overlooked this fact but consider this as another problem which is separate from our application. However, we want to clarify that it was Ballmann (1969a, p. 182) who put *Palaeocryptonyx gaillardi* into synonymy with *Palaeocryptonyx edwardsi* (Depéret, 1887). We agree completely with Ballmann and emphasize the taxonomic and morphologic differences between *Palaeortyx* and *Palaeocryptonyx*, as described in Göhlich & Mourer-Chauviré (in press). In addition, it was again Ballmann (1969b, p. 182) who first indicated that *P. longipes* is synonymous with *P. phasianoides*: ‘Je crois avoir des raisons de penser que *Palaeoperdix longipes* Milne-Edwards est un synonyme de *Palaeortyx phasianoides*’. We agree completely with this point (see Göhlich & Mourer-Chauviré, in press) and therefore regard Ballmann as the first reviser (regarding fixation of species priority).

7. As already described by Göhlich & Mourer-Chauviré (BZN 60: 211–214), the approach of Mlíkovský (2000, 2002) causes considerable disruption and confusion affecting *Palaeortyx phasianoides*, *Mionetta blanchardi* and *Ameripodius alexis*. Because of an incorrect determination, Mlíkovský (2000) placed the accepted and well known fossil phasianid species *Palaeortyx phasianoides* in synonymy with the fossil anatid taxon *Mionetta blanchardi*. The specimen that he referred to *Mionetta blanchardi* is neither *M. blanchardi* nor *P. phasianoides*, but it is *Ameripodius alexis* (see para. 3 above). Mlíkovský (2000) in designating a lectotype for *P. phasianoides* did not explain why he did not recognise the syntype scapula (MNHN Av 2895) as a *P. phasianoides*; he (Mlíkovský, 2000, p. 93) argued that ‘its [syntype scapula] taxonomic identity remains unresolved at present’. The comparisons of Göhlich & Mourer-Chauviré (in press) resulted in morphological and metrical characters which identify the syntype scapula as a typical phasianid belonging to the taxon *P. phasianoides* and distinguishable from other fossil and recent phasianids. Accepting the syntype humerus (MNHN Av 2896) as the lectotype would result in the invalidity of the taxa *Palaeortyx phasianoides* and *Ameripodius alexis*; the latter would become a junior synonym of *P. phasianoides*. Because the chosen lectotype humerus is not a phasianid but belongs in the family QUERCYMEGAPODIIDAE, *P. phasianoides* would have to be excluded from the genus *Palaeortyx*. The rest of the material, formerly known and described from different localities as *P. phasianoides*, would have to be redescribed and given a new name.

Additional reference

Göhlich, U.B. & Mourer-Chauviré, C. (In press). Revision of the phasianids (Aves, Galliformes) from the Lower Miocene of St.-Gérard-le-Puy (France). *Palaeontology*.

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I have read and fully support this application.

OPINION 2079 (Case 2926)

***Trichia* Hartmann, 1840 (Mollusca, Gastropoda): proposed conservation; and TRICHIINAE Ložek, 1956 (Gastropoda): proposed emendation of spelling to TRICHIINAE, so removing the homonymy with TRICHIIDAE Fleming, 1821 (Insecta, Coleoptera) not approved**

Abstract. The Commission has ruled that the name *Trichia* Hartmann, 1840 (Mollusca, Gastropoda) is not conserved. The names *Trochulus* Chemnitz, 1786, *Trichia* De Haan, 1839 (Crustacea, Brachyura) and TROCHULINAE Lindholm, 1927 are placed on Official Lists. *Trichia* Hartmann, 1840, *Trichia* Nietner, 1861 (Lepidoptera), *Trichia* Reuter, 1875 (Heteroptera), and TRICHIINAE Ložek, 1956 are placed on Official Indexes.

Keywords. Nomenclature; taxonomy; Gastropoda; Brachyura; Coleoptera; TROCHULINAE; *Trochulus*; *Trichia*; pulmonates; crabs; beetles.

Ruling

- (1) Proposals put forward to conserve the name *Trichia* Hartmann, 1840 by the suppression of *Trochulus* Alten, 1812 [= *Trochulus* Chemnitz, 1786; see Editor's note] (Gastropoda) and *Trichia* De Haan, 1839 (Brachyura) were not approved.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Trochulus* Chemnitz, 1786 (gender: masculine), type species by monotypy *Helix hispida* Linnaeus, 1758 (Gastropoda);
 - (b) *Trichia* De Haan, 1839 (gender: feminine), type species by monotypy *Trichia dromiaeformis* De Haan, 1839 (Brachyura);
 - (c) *Trichius* Fabricius, 1775 (gender: masculine), type species by subsequent designation by Latreille (1810) *Scarabaeus fasciatus* Linnaeus, 1758 (Coleoptera).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *hispida* Linnaeus, 1758, as published in the binomen *Helix hispida* (specific name of the type species of *Trochulus* Chemnitz, 1786) (Gastropoda);
 - (b) *dromiaeformis* De Haan, 1839, as published in the binomen *Trichia dromiaeformis* (specific name of the type species of *Trichia* De Haan, 1839) (Brachyura);
 - (c) *fasciatus* Linnaeus, 1758, as published in the binomen *Scarabaeus fasciatus* (specific name of the type species of *Trichius* Fabricius, 1775) (Coleoptera).
- (4) The name TROCHULINAE Lindholm, 1927 (type genus *Trochulus* Chemnitz, 1786) is hereby placed on the Official List of Family-Group Names in Zoology (Gastropoda).
- (5) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

- (a) *Trichia* Hartmann, 1840 (a junior primary homonym of *Trichia* De Haan, 1839) (Gastropoda);
- (b) *Zalasius* Rathbun, 1897 (an unnecessary substitute name for *Trichia* De Haan, 1839) (Brachyura);
- (c) *Erethismus* Gistel, 1848 (a junior objective synonym of *Trichia* Hartmann, 1840) (Gastropoda);
- (d) *Macneillena* Iredale, 1930 (a junior objective synonym of *Trichia* De Haan, 1839) (Brachyura);
- (e) *Trichia* Hong, 1981 (a junior homonym of *Trichia* De Haan, 1839) (Diptera).
- (6) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
 - (a) TRICHIINAE Ložek, 1956 (based on *Trichia* Hartmann, 1840, a junior primary homonym of *Trichia* De Haan, 1839) (Gastropoda);
 - (b) ZALASIINAE Serène, 1968 (based on *Zalasius* Rathbun, 1897, an unnecessary substitute name for *Trichia* De Haan, 1839) (Brachyura).

History of Case 2926

An application to conserve the name *Trichia* Hartmann, 1840 (Gastropoda) and to remove the homonymy between the family-group names TRICHIIDAE Fleming, 1821 (Coleoptera, Palaearctic dung beetles) and TRICHIINAE Ložek, 1956 (Gastropoda) by emending the stem of the name *Trichia* Hartmann, 1840 on which the gastropod name is based, to become TRICHIAINAE was received from E. Gittenberger and L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) on 17 January 1994. After correspondence the issue of homonymy with the ambiregnal taxon *Trichia* von Haller, 1768 (Myxomycetes or Mycetozoa) was included and the case was published, with E. Gittenberger as the sole author, in BZN 57: 17–23 (March 2000). Notice of the case was sent to appropriate journals.

Comments opposing the application

Comments opposing the application were received from Holthuis (BZN 57: 109–110) stating that ‘the only argument for . . . saving *Trichia* Hartmann, 1840 was its frequent usage in the last ten years, but in Myxomycetes (or Mycetozoa) *Trichia* had clearly been used unambiguously for a much longer period of time . . . in this case the Code should be strictly applied . . .’ Rosenberg (BZN 57: 225–227), following Article 1.1.1 of the Code, reasoned that slime molds, being typically studied by mycologists who follow the botanical Code, could be considered to be outside the scope of zoological nomenclature. However, Article 2.2 states that any available name of a taxon that has at any time been classified as animal continues to compete in homonymy in zoological nomenclature even though the taxon is later not classified as animal. Since 90% of myxomycetan genera are recorded in standard indexing sources, homonymy with strictly zoological names is easily detected . . . the arguments against conserving *Trichia* Hartmann, 1840 are persuasive. Rosenberg also was opposed to emending the spelling of TRICHIINAE Ložek, 1956 (Gastropoda) to TRICHIAINAE. In opposing the application Kadolsky (BZN 58: 53) also addressed the ambiregnal issue with reference to the homonymy of the myxomycete family-group name and that of TRICHIIDAE Fleming, 1821 (Coleoptera).

Bouchet & Falkner (BZN 58: 141–142) sympathized with Rosenberg's view because nomenclature becomes impenetrable when *Hemitrichia* Möllendorff, 1888 is regarded as invalid because of homonymy in the Myxomycetes and *Trichia* Hartmann, 1840 is not. They further pointed out that *Trochulus* should be dated from Schröter (1788) who published the binomen *Trochulus hispidus* in an index to Chemnitz's (1786) work although placed on the Official Index by Direction 1, Schröter made the name available (it satisfies the conditions of Article 11.4.3 of the Code). *Trochulus* Schröter, 1788 is available under Article 12.2.2 with the type species, by monotypy, *Helix hispida* Linnaeus, 1758 [see Editor's note].

Comments in support of the application

Comments in support of the application were published in BZN 57: 166–167. Gittenberger, Goud, Maassen, Menkhorst, Ripken, de Winter & Bank, in support of the application, pointed out that if the names *Trichia* and TRICHIIDAE in Myxomycetes are accepted as senior homonyms in zoological nomenclature, as Holthuis (BZN 57: 109–110) had proposed, a further application must be brought to the Commission to remove the homonymy between TRICHIIDAE in Myxomycetes, Insecta and Mollusca.

Heppell (BZN 57: 223–225), in support of the application to conserve *Trichia* Hartmann, 1840, proposed that the names *Capillifera* Honigmann, 1906 (Mollusca), *Trichia* Nietner, 1861 (Lepidoptera) and *Trichia* Reuter, 1875 (Heteroptera) be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

Krell (BZN 58: 54–56) also supported the application 'in particular the conservation of the scarab beetle family name TRICHIIDAE Fleming, 1821' and further noted that Fries was not the original author of the name but Nees von Esenbeck who introduced 'Trichocisti' [Myxomycetes] in 1816.

Ambiregnal taxa

The broad issues raised by ambiregnal taxa were reviewed by Corliss (BZN 52: 11–17). Following an open meeting of the Bionomenclature Committee convened at the International Union of Biological Sciences (IUBS) General Assembly in Naples in November 2000 it was noted that the nomenclature of ambiregnal organisms (at both the botanical/zoological and botanical/bacteriological interfaces) presented problems and existing names should not be replaced because of inter-regnal homonymy. Krell added further comments on this issue (see BZN 58: 54–56, 142).

Decision of the Commission

The application was sent to the Commission for voting on 1 September 2002. Members of the Commission were invited to vote on the proposals published in BZN 57: 20–21, with the additional proposals published in BZN 57: 224. At the close of the voting period on 1 December 2002 the proposals received a majority of the votes cast but failed to reach the required two-thirds majority (15 votes in favour and 10 against; two Commissioners did not vote and one was on leave of absence).

Bouchet commented on his voting paper that the name TRICHIINAE Ložek, 1956 was not accompanied by a description and does not satisfy the provisions of Article 13.1.1

but it was extensively used as valid before 2000 and meets the requirements of Article 13.2.1. TRICHIINAE was made available by Schileyko, 1970 (*Zoologicheskij Zhurnal*, **49**(9): 1307). Bouchet also noted that the voting paper did not address the issue of the author and date of *Trochulus*. Bouchet & Falkner (BZN **58**: 141) advocated that it should be attributed to Schröter, 1788, and this should have been reflected in the proposals (1)(a)(i), (5)(a) and (6)(a).

Rosenberg commented that Schröter (1788) had not been accepted by malacologists as consistently binominal, and so cannot be a source for the genus *Trochulus* as suggested by Bouchet & Falkner. Accepting Schröter's work as binominal would displace hundreds of later names in a situation exactly analogous to that of Karsten's (1789) *Museum Leskeanum* (BZN **53**: 38–42), which was suppressed in Opinion 1877 (BZN **54**: 193).

Under the bylaws the case was submitted for a revote.

On 1 March 2003 the members of the Commission were invited to vote again on the proposal published in BZN **57**: 20–21 and the additional or alternative proposals to para. 11(6) published in BZN **57**: 223–224. At the close of the voting period on 1 June 2003 the votes were as follows: 12 Commissioners voted FOR all of the proposals, 12 Commissioners voted AGAINST all the proposals, no vote was received from Böhme.

Commissioners voting against this case pointed out that none of the species that could be affected by a generic change in this particularly complicated case is of special importance and to rule that the name *Trichia* Hartmann, 1840 (Gastropoda) is not rendered invalid by the existence of *Trichia* von Haller, 1768 in Myxomycetes would avoid rather than solve the problem of extant homonymy.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

- dromiaeformis*, *Trichia*, De Haan, 1839, *Fauna Japonica*, fasc. 4, pl. 29, fig. 4; pl. H.
Erethismus Gistel, 1848, *Naturgeschichte des Thierreichs für höhere Schulen*, p. xi.
fasciatus, *Scarabaeus*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 352.
hispida, *Helix*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 771.
Macneillena Iredale, 1930, *Australian Zoologist*, **6**(2): 175.
Trichia De Haan, 1839, *Fauna Japonica*, fasc. 4, pl. 29, fig. 4; pl. H.
Trichia Hartmann, 1840, *Erd- und Süßwasser-Gasteropoden*, p. xiii, footnote.
Trichia Hong, 1981, *Eocene fossil Diptera Insecta in amber in Fushun coalfield*, p. 28.
TRICHIINAE Ložek, 1956, Klic Československých Měkkysu. [*Key to Czechoslovakian Mollusca*], p. 200.
Trichius Fabricius, 1775, *Systema Entomologiae, sistens Insectorum classes, ordines, genera, species*, p. 40.
TROCHULINAE Lindholm, 1927, *Archiv für Molluskenkunde*, **59**(2): 122.
Trochulus Chemnitz, 1786, *Neues Systematisches Conchylien-Cabinet*, vol. 9, pt. 2, p. 52.
ZALASIINAE Serène, 1968, UNESCO Special Publication, Singapore, 1 (Fauna 3, Cc3), p. 62.
Zalasius Rathbun, 1897, *Proceedings of the Biological Society of Washington*, **11**: 166.

The following is the reference for the designation of *Scarabaeus fasciatus* Linnaeus, 1758 as the type species of the nominal genus *Trichius* Fabricius, 1775:

Latreille, P.A. 1810. *Considérations générales sur l'ordre naturel des animaux, composant les classes des crustacés, des arachnides et des insectes; avec un tableau méthodique de leurs genres, disposés en familles*, p. 428.

Editor's note:

Under Opinion 184 and Direction 1 the generic name *Trochulus* is available from Chemnitz, 1786 (vol. 9, part 2, p. 52, pl. 122, figs. 1057–1058) (see para. 5 of the application). The ruling in the Opinion and Direction was misinterpreted and is given below:

Opinion 184 states that any new generic name published in volumes 1 to 11 of Martini & Chemnitz 1769–1795 is to be accepted as available nomenclatorially, provided that individually it satisfies the requirements of the International Code. No new specific or subspecific trivial name published in these volumes has any status in nomenclature. The position as respects generic names published in these volumes will need to be re-examined if later it is decided to reject generic names published by authors not applying the binominal system. (ICZN, 1944. Opinion 184. On the status of names first published in volumes 1 to 11 of Martini (F.H.W.) and Chemnitz (J.H.) *Neues Systematisches Conchylien-Cabinet* Nürnberg, 1769–1795. *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*, vol. 3, part 3, pp. 25–36. London).

Direction 1. 1954. (Pp. 408, 410) Addition to the 'Official Lists' and 'Official Indexes' of certain books dealt with in 'Opinions' 182 to 194.

Opinion 184: The following entry is to be made in the *Official Index of Rejected and Invalid Works in Zoological Nomenclature*: Martini (F.H.W.) and Chemnitz (J.H.), 1769–1795, *Neues Systematisches Conchylien-Cabinet*, Volumes 1–11, all new specific names and names of lower rank.

Note 3: No proposal is here submitted in regard to the status of new generic names published in volumes 1–11 of Martini and Chemnitz, *Neues Systematisches Conchylien-Cabinet*, for the Ruling given in Opinion 184 was expressly stated to be an interim Ruling, pending a decision being taken as to the interpretation of Proviso (b) to Article 25. A decision on this later question was taken in 1948, and it will be necessary, therefore, to review the question of the status of new generic names published in the foregoing work. A proposal on this subject will therefore be submitted as soon as possible (File Z.S.N. 800).

(ICZN, 1954. Addition to the 'Official Lists' and 'Official Indexes' of certain books dealt with in 'Opinions' 182 to 194. *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*, vol. 3, part 30, pp. 401–416. London).

File Z.S.N. 800 was closed without further action on 10 June 1985.

OPINION 2080 (Case 3233)***Achatina janii* De Betta & Martinati, 1855 (currently *Cecilioides janii*; Mollusca, Gastropoda): proposed conservation of the specific name not approved**

Abstract. The Commission has ruled that priority should be maintained for the specific name of a subterranean, eyeless pulmonate, *Achatina veneta* Strobel, 1855. The junior synonym *Achatina janii* De Betta & Martinati, 1855 is not conserved.

Keywords. Nomenclature; taxonomy; Mollusca; Gastropoda; FERUSSACIIDAE; *Cecilioides janii*; *Cecilioides veneta*; pulmonates; southern Europe.

Ruling

- (1) Under the plenary power it is hereby ruled that priority is to be maintained for the name *veneta* Strobel, 1855, as published in the binomen *Achatina veneta*.
- (2) The name *veneta* Strobel, 1855, as published in the binomen *Achatina veneta* is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3233

An application to conserve the specific name of *Achatina janii* De Betta & Martinati, 1855 for a subterranean, eyeless pulmonate gastropod from southern Europe, threatened by *Achatina veneta* Strobel, 1855, was received from F. Giusti and G. Manganelli (Università di Siena, Siena, Italy) on 26 February 2002. After correspondence the case was published in BZN 59: 77–81 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. A comment opposing the application was published in BZN 60: 51–52. A reply to the opposing comment in which the authors further support their application was published in BZN 60: 52.

The application was sent to the Commission for voting on 1 September 2003. The case received a majority of the votes cast on 1 December 2003 but failed to reach the required two-thirds majority (13 votes FOR, 8 AGAINST; 1 Commissioner abstained). Voting against, Ng commented that while in sympathy with the applicants' case and arguments he was compelled, in lieu of greater support from the malacological community, to vote in favour of keeping the status quo. Banks et al. (2000) fixed the taxonomy following the Code and theirs is the most recent treatment. He further stated that the species involved here is also not of substantial biological significance and the name has been used primarily by taxonomists. The application was submitted for a second vote under Bylaw 35.

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote again on the proposals published in BZN 59: 79. At the close of the voting period on 1 June 2004 the votes were as follows: 13 Commissioners voted FOR the proposals, 8 Commissioners voted AGAINST, Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

The case received a majority of the votes cast on the second vote but since the two-thirds majority required under Bylaw 35 was not achieved the proposals were not approved.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

veneta, *Achatina*, Strobel, 1855, *Giornale di Malacologia*, **2**: 137.

OPINION 2081 (Case 3248)***Prositala* Germain, 1915 (Mollusca, Gastropoda): given precedence over *Massaihelix* Germain, 1913**

Abstract. The Commission has ruled that the generic name *Prositala* Germain, 1915 for a group of African land snails (family CHAROPIDAE) is conserved by giving it precedence over the little used senior subjective synonym *Massaihelix* Germain, 1913 whenever the two are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Mollusca; Gastropoda; Pulmonata; CHAROPIDAE; *Massaihelix*; *Prositala*; *Massaihelix butumbiana*; *Prositala fernandopoensis*; African land snails.

Ruling

- (1) Under the plenary power it is hereby ruled that the name *Prositala* Germain, 1915 is given precedence over the name *Massaihelix* Germain, 1913 whenever the two are considered to be synonyms.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Prositala* Germain, 1915 (gender: feminine), type species by original designation *Sitala* (*Prositala*) *fernandopoensis* Germain, 1915, with the endorsement that it is to be given precedence over the name *Massaihelix* Germain, 1913 whenever the two are considered to be synonyms;
 - (b) *Massaihelix* Germain, 1913 (gender: feminine), type species by monotypy *Helix butumbiana* von Martens, 1895, with the endorsement that it is not to be given priority over the name *Prositala* Germain, 1915 whenever the two are considered to be synonyms.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *fernandopoensis* Germain, 1915, as published in the binomen *Sitala* (*Prositala*) *fernandopoensis* (specific name of the type species of *Prositala* Germain, 1915);
 - (b) *butumbiana* von Martens, 1895, as published in the binomen *Helix butumbiana* (specific name of the type species of *Massaihelix* Germain, 1913).

History of Case 3248

An application to conserve the generic name *Prositala* Germain, 1915 for a group of African land snails (family CHAROPIDAE), by giving it precedence over the little used senior subjective synonym *Massaihelix* Germain, 1913 whenever the two are considered to be synonyms, was received from Bernard Verdcourt (*Royal Botanic Gardens, Kew, Richmond, Surrey, U.K.*) and A.C. van Bruggen (*c/o National Museum of Natural History, Leiden, The Netherlands*) on 19 June 2002. After correspondence the case was published in BZN 59: 239–241. The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote on the proposals published in BZN **59**: 240. At the close of the voting period on 1 June 2004 the votes were as follows: 14 Commissioners voted FOR the proposals, 7 Commissioners voted AGAINST, Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

Voting against, Alonso-Zarazaga commented that he could not see in this case the 'widespread use' of any of the genus-group names in question. The genera and species mentioned are recent and of little interest except for pure systematists, so the Principle of Priority must stand in this case. Štys made the same point and further questioned the statement in para. 1 of the application '*Massaihelix* is a misleading name . . .', since the facts are nomenclaturally irrelevant, but psychologically persuasive. Mahnert, also voting against, commented that application of the Principle of Priority will concern few specialists, since only a few papers deal with these animals.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

butumbiana, *Helix*, von Martens, 1895, *Nachrichtsblatt der Deutschen Malakozoologischen Gesellschaft*, **27**: 179.

fernandopoensis, *Sitala* (*Prositala*), Germain, 1915, *Bulletin du Muséum National d'Histoire Naturelle, Paris*, **21**: 283.

Massaihelix Germain, 1913, *Bulletin du Muséum National d'Histoire Naturelle, Paris*, **19**: 352.

Prositala Germain, 1915, *Bulletin du Muséum National d'Histoire Naturelle, Paris*, **21**: 283.

OPINION 2082 (Case 3070)***Phrynus ceylonicus* C.L. Koch, 1843 (Arachnida, Amblypygi): specific name given precedence over the specific names of *Phalangium reniforme* Linnaeus, 1758 and *Phalangium lunatum* Pallas, 1772**

Abstract. The Commission has ruled that the specific name of *Phrynus ceylonicus* C.L. Koch, 1843 for a species of whip spider from Sri Lanka (family PHRYNICHIDAE) is conserved by giving it precedence over the senior subjective synonyms *Phalangium reniforme* Linnaeus, 1758 and *Phalangium lunatum* Pallas, 1772 whenever the names are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Amblypygi; PHRYNICHIDAE; *Phrynichus*; *Phalangium*; *Phrynichus ceylonicus*; *Phalangium reniforme*; *Phalangium lunatum*; whip spider; Sri Lanka.

Ruling

- (1) Under the plenary power it is hereby ruled that the name *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, is given precedence over the names *reniforme* Linnaeus, 1758, as published in the binomen *Phalangium reniforme*, and *lunatum* Pallas, 1772, as published in the binomen *Phalangium lunatum*, whenever it and either of the other two are considered to be synonyms.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Phrynichus* Karsch, 1879 (gender: masculine), type species by original designation *Phalangium reniforme* Linnaeus, 1758;
 - (b) *Phalangium* Linnaeus, 1758 (gender: neuter), type species by subsequent designation by Latreille (1810) *Phalangium opilio* Linnaeus, 1758.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, with the endorsement that it is to be given precedence over the names *reniforme* Linnaeus, 1758, as published in the binomen *Phalangium reniforme*, and *lunatum* Pallas, 1772, as published in the binomen *Phalangium lunatum*, whenever it and either of the other two are considered to be synonyms;
 - (b) *reniforme* Linnaeus, 1758, as published in the binomen *Phalangium reniforme*, with the endorsement that it is not to be given priority over the name *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, whenever the two are considered to be synonyms (specific name of the type species of *Phrynichus* Karsch, 1879);
 - (c) *lunatum* Pallas, 1772, as published in the binomen *Phalangium lunatum*, with the endorsement that it is not to be given priority over the name *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, whenever the two are considered to be synonyms;

- (d) *opilio* Linnaeus, 1758, as published in the binomen *Phalangium opilio* (specific name of the type species of *Phalangium* Linnaeus, 1758).

History of Case 3070

An application to conserve the specific name *Phrynus ceylonicus* C.L. Koch, 1843 for a species of whip spider from Sri Lanka (family PHRYNICHIDAE) by giving it precedence over the senior subjective synonyms *Phalangium reniforme* Linnaeus, 1758 and *Phalangium lunatum* Pallas, 1772, was received from Peter Weygoldt (*Institut für Biologie I (Zoologie), Albert-Ludwigs-Universität, Freiburg, Germany*) on 29 September 1997. After correspondence the case was published in BZN 59: 242–245. The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote on the proposals published in BZN 59: 243. At the close of the voting period on 1 June 2004 the votes were as follows: 15 Commissioners voted FOR the proposals, 6 Commissioners voted AGAINST, Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

Voting against, Alonso-Zarazaga commented that 'once the confusion has been solved, the Principle of Priority must stand. The use of the name *Phrynus ceylonicus* in recent times seems to follow the overlooking of Karsch's (1879) conclusions, which is difficult to understand, since Karsch's genus *Phrynichus* is in common use. I think it is more stabilizing to use the valid Linnean name *Phrynichus reniformis* (which is also the type species name) once and for all, and supersede the old misuses in the future'. Mahnert, also voting against, commented that application of the Principle of Priority would not alter current understanding of the species involved, even if confusion between the three specific names was common in the older literature. In addition, Štys commented that conditional suppressions are usually hardly understandable for those students of the group who are not interested in or do not have access to pertinent nomenclatural sources. He was not in favour of giving precedence to a junior name over a Linnean name whose application is unproblematic since the type specimen is extant and which was often quoted as a type species of the genus.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- ceylonicus*, *Phrynus*, C.L. Koch, 1843, *Die Arachniden. Getreu nach der Natur Abgebildet und Beschrieben*, vol. 10, p. 35.
lunatum, *Phalangium*, Pallas, 1772, *Spicilegia Zoologica*, vol. 9, p. 35.
opilio, *Phalangium*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 618.
Phalangium Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 618.
Phrynichus Karsch, 1879, *Archiv für Naturgeschichte (Berlin)*, 45: 197.
reniforme, *Phalangium*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 619.

The following is the reference for the designation of *Phalangium opilio* Linnaeus, 1758 as the type species of *Phalangium* Linnaeus, 1758:

- Latreille, P.A. 1810. *Considérations générales sur l'ordre naturel des Animaux composant les classes des Crustacés, des Arachnides, et des Insectes: avec un Tableau méthodique de leurs genres, disposés en familles*, p. 425.

OPINION 2083 (Case 3205)***Cyphosoma* Mannerheim, 1837 (Insecta, Coleoptera): conserved**

Abstract. The Commission has ruled that the name *Cyphosoma* Mannerheim, 1837 for a group of jewel beetles (family BUPRESTIDAE) is conserved by suppression of the senior synonym *Cyphonota* Dejean, 1833.

Keywords. Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Cyphosoma*; jewel beetles; Palaearctic.

Ruling

- (1) Under the plenary power the name *Cyphonota* Dejean, 1833 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Cyphosoma* Mannerheim, 1837 (gender: neuter), type species by subsequent designation by Bílý (2001) of the replaced nominal genus *Cyphonota* Dejean, 1833 *Buprestis tatarica* Pallas, 1773, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *tatarica* Pallas, 1773, as published in the binomen *Buprestis tatarica*, (specific name of the type species of *Cyphosoma* Mannerheim, 1837) is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name *Cyphonota* Dejean, 1833, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 3205

An application to conserve the generic names *Cyphosoma* Mannerheim, 1837 and *Halecia* Laporte & Gory, 1837 for two groups of jewel beetles (family BUPRESTIDAE) by suppression of *Cyphonota* Dejean, 1833 (a senior synonym of *Cyphosoma*) and to give conditional precedence to *Halecia* over its senior synonym *Pristiptera* Dejean, 1833 was received from S. Bílý (National Museum, Prague, Czech Republic) and C.L. Bellamy (*Plant Pest Diagnostics Lab., California Department of Food & Agriculture, Sacramento, California, U.S.A.*) on 16 May 2001. After correspondence the case was published in BZN 59: 249–252. The title, abstract and keywords of the case were published on the Commission's website. A comment opposing the application was published in BZN 60: 143 (June 2003). A comment in support of the application was published in BZN 60: 143 (June 2003).

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote on the proposals published in BZN 59: 250–251. In the process of voting, Commissioners pointed out certain ambiguities relating to the proposal to give precedence to *Halecia* Laporte & Gory, 1837 over *Pristiptera* Dejean, 1833. Commissioners decided to publish the present Opinion relating to the conservation of *Cyphosoma* Mannerheim, 1837 and to give further consideration to a new proposal to resolve the *Halecial* *Pristiptera* situation.

At the close of the voting period on 1 June 2004, and taking account of votes modified when the vote was limited to *Cyphosoma/Cyphonota*, the votes were as follows: 21 Commissioners voted FOR the proposals relating to *Cyphosoma/Cyphonota*, no Commissioners voted AGAINST, Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Cyphonota Dejean, 1833, *Catalogue des Coléoptères de la collection de M. le Comte Dejean, Livraison I*, p. 79.

Cyphosoma Mannerheim, 1837, *Bulletin de la Société Impériale des Naturalistes de Moscou*, 1837(8): 91.

tatarica, *Buprestis*, Pallas, 1773, *Reisen durch verschiedene Provinzen des Russischen Reiches, vom Jahr 1771*, vol. 2, p. 464.

The following is the reference for the designation of *Buprestis tatarica* Pallas, 1773 as the type species of *Cyphosoma* Mannerheim, 1837, the replaced nominal genus of *Cyphonota* Dejean, 1833:

Bílý, S. 2001. *Folia heyrovskyana*, 9(2): 150.

OPINION 2084 (Case 3209)***Lesteva* Latreille, 1797 and *Anthophagus* Gravenhorst, 1802 (Insecta, Coleoptera): usage conserved by the designation of *L. punctulata* Latreille, 1804 as the type species of *Lesteva***

Abstract. The Commission has ruled that the widespread usage of the generic names *Lesteva* Latreille, 1797 and *Anthophagus* Gravenhorst, 1802 for two groups of Palaearctic rove beetles (family STAPHYLINIDAE) is conserved by designating *Lesteva punctulata* Latreille, 1804 as the type species of *Lesteva*.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Lesteva*; *Anthophagus*; *Staphylinus alpinus*; *Lesteva punctulata*; rove beetles; Holarctic; Oriental.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Lesteva* Latreille, 1797 are hereby set aside and *Lesteva punctulata* Latreille, 1804 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Lesteva* Latreille, 1797 (gender: feminine), type species by designation in (1) above *Lesteva punctulata* Latreille, 1804;
 - (b) *Anthophagus* Gravenhorst, 1802 (gender: masculine), type species by subsequent designation by Thomson (1859) *Staphylinus alpinus* Fabricius, 1793.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *punctulata* Latreille, 1804, as published in the binomen *Lesteva punctulata* (specific name of the type species of *Lesteva* Latreille, 1797);
 - (b) *alpinus* Fabricius, 1793, as published in the binomen *Staphylinus alpinus* (specific name of the type species of *Anthophagus* Gravenhorst, 1802).

History of Case 3209

An application to conserve the usage of the generic names *Lesteva* Latreille, 1797 and *Anthophagus* Gravenhorst, 1802 for two groups of Palaearctic rove beetles (family STAPHYLINIDAE), by designating *Lesteva punctulata* Latreille, 1804 as the type species of *Lesteva*, was received from Lee H. Herman (*American Museum of Natural History, New York, N. Y., U.S.A.*) on 6 June 2001. After correspondence the case was published in BZN 59: 191–193 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 192. At the close of the voting period on 1 March

2004 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Calder and Ng were on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

alpinus, *Staphylinus*, Fabricius, 1793, *Entomologiae Systematicae* . . ., vol. 1(2), p. 526.

Anthophagus Gravenhorst, 1802, *Coleoptera Microptera Brunsvicensia* . . ., p. 120.

Lesteva Latreille, 1797, *Précis des caractères génériques des insectes, disposés dans un ordre naturel*, p. 75.

punctulata, *Lesteva*, Latreille, 1804, *Histoire naturelle, générale et particulière, des crustacés et des insectes*, vol. 9, p. 369.

The following is the reference for the designation of *Staphylinus alpinus* Fabricius, 1793 as the type species of the nominal genus *Anthophagus* Gravenhorst, 1802:

Thomson, C. 1859. *Skandinaviens Coleoptera, synoptiskt bearbetade*, vol. 1, p. 48.

OPINION 2085 (Case 3214)***Aegorhinus* Erichson, 1834 (Insecta, Coleoptera): given precedence over *Psuchocephalus* Latreille, 1828**

Abstract. The Commission has ruled that the generic name *Aegorhinus* Erichson, 1834, for a genus of South American weevils (family CURCULIONIDAE), is conserved by giving it precedence over the earlier name *Psuchocephalus* Latreille, 1828 whenever the two are considered to be synonyms. The name *Psuchocephalus* Latreille, 1828 was used as the valid name by Alonso-Zarazaga & Lyal in 1999.

Keywords. Nomenclature; taxonomy; Coleoptera; CURCULIONIDAE; *Aegorhinus*; *Psuchocephalus*; *Aegorhinus phaleratus*; *Curculio leprosus*; weevils; Argentina; Chile; Subantarctic subregion.

Ruling

- (1) Under the plenary power it is hereby ruled that the name *Aegorhinus* Erichson, 1834 is given precedence over the name *Psuchocephalus* Latreille, 1828, whenever the two are considered to be synonyms.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Aegorhinus* Erichson, 1834 (gender: masculine), type species by monotypy *Aegorhinus phaleratus* Erichson, 1834, with the endorsement that it is to be given precedence over the name *Psuchocephalus* Latreille, 1828 whenever the two are considered to be synonyms;
 - (b) *Psuchocephalus* Latreille, 1828 (gender: masculine), type species by monotypy *Curculio leprosus* Olivier, 1807, with the endorsement that it is not to be given priority over the name *Aegorhinus* Erichson, 1834 whenever the two are considered to be synonyms.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *phaleratus* Erichson, 1834, as published in the binomen *Aegorhinus phaleratus* (specific name of the type species of *Aegorhinus* Erichson, 1834);
 - (b) *vitulus* Fabricius, 1775, as published in the binomen *Curculio vitulus* (senior synonym of *Curculio leprosus* Olivier, 1807, the specific name of the type species of *Psuchocephalus* Latreille, 1828).
- (4) The name *Psuchocephalus* Imhoff, 1856 (an incorrect subsequent spelling of *Psuchocephalus* Latreille, 1828) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 3214

An application to conserve the generic name *Aegorhinus* Erichson, 1834, for a genus of South American weevils (family CURCULIONIDAE), by giving it precedence over the earlier name *Psuchocephalus* Latreille, 1828, which was used as the valid name by Alonso-Zarazaga & Lyal in 1999, was received from Mario Elgueta (*Museo*

Nacional de Historia Natural, Santiago, Chile) and Guillermo Kuschel (*Mt Roskill, Auckland, New Zealand*) on 30 July 2001. After correspondence the case was published in BZN **59**: 253–255. The title, abstract and keywords of the case were published on the Commission's website. A comment from Alonso-Zarazaga & Lyal in support of the application was published in BZN **60**: 144 (June 2003).

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote on the proposals published in BZN **59**: 254. At the close of the voting period on 1 June 2004 the votes were as follows: 21 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Aegorhinus Erichson, 1834, *Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum*, **16**(suppl.): 261.

phaleratus, *Aegorhinus*, Erichson, 1834, *Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum*, **16**(suppl.): 262.

Psuchocephalus Latreille, 1828, *Dictionnaire Classique d'Histoire Naturelle*, vol. 14, p. 597.

Psuphocephalus Imhoff, 1856, *Versuch einer Einführung in das Studium der Koleopteren*, p. 221.

vitulus, *Curculio*, Fabricius, 1775, *Systema Entomologiae*, p. 152.

OPINION 2086 (Case 3231)**STAPHYLINIDAE Latreille, 1804 (Insecta, Coleoptera): 17 specific names conserved**

Abstract. The Commission has ruled that 17 specific names of rove beetles (family STAPHYLINIDAE) threatened by senior (or, in three cases, junior) names are conserved. In the three cases where conservation of the senior synonym (and in one case where conservation of the junior synonym) was necessary, the names conserved were junior primary homonyms when published. These names were replaced to prevent homonymy, but the replacement names have not been used widely. The species represented by the homonyms are now placed in different genera and have not been considered congeneric since 1899.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; rove beetles.

Ruling

(1) Under the plenary power it is hereby ruled that:

- (a) the specific names in column 2 of Table 1, as originally published in binomina with the generic names indicated in column 2, are given precedence over the specific names in column 3, whenever they are junior primary homonyms or are considered to be synonyms;
- (b) the specific names in column 2 of Table 2, as originally published in binomina with the generic names in column 4 of Table 2, are not invalid by reason of being junior primary homonyms of the specific names in column 3 of Table 2.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

The number in square brackets is the number of the name in Table 1 unless otherwise stated.

abbreviatus, *Carabus*, Fabricius, 1779 [2]
 analis, *Staphylinus*, Fabricius, 1787 [15]
 angularis, *Staphylinus*, Paykull, 1800 [17]
 angusticollis, *Lesteva*, Mannerheim, 1830 [2],
 nomen protectum
 antilope, *Bledius*, Peyron, 1858 [9]
 assimilis, *Philonthus*, Nordmann, 1837 [16]
 cursor, *Staphylinus*, O. Müller, 1776 [6]
 flavipes, *Staphylinus*, Linnaeus, 1758 [7]
 fulgidus, *Staphylinus*, Fabricius, 1787 [Table
 2, no. 3]
 fulgidus, *Staphylinus*, Fabricius, 1793 [16]
 glaber, *Staphylinus*, O. Müller, 1776 [14]
 graellsii, *Bledius*, Fauvel, 1865 [9]
 imhoffii, *Omalium*, Heer, 1839 [3]
 iracundus, *Staphylinus*, Say, 1830 [16]

italicus, *Stenus*, Baudi, 1870 [1]
 longipenne, *Anthobium*, Erichson, 1839 [3]
 longipenne, *Anthobium*, Stephens, 1834 [Table
 2, no. 1]
 niger, *Staphylinus*, O. Müller, 1764 [13]
 obscurus, *Carpelimus*, Stephens, 1834 [11]
 penetrans, *Staphylinus*, O. Müller, 1776 [12]
 picipennis, *Staphylinus*, Fabricius, 1793 [12]
 plagiatus, *Quedius*, Mannerheim, 1843 [14]
 nomen protectum
 planus, *Staphylinus*, Paykull, 1792 [7]
 punctata, *Lesteva*, Erichson, 1839 [5]
 pygmaeum, *Omalium*, Gravenhorst, 1806 [8]
 rivularis, *Staphylinus*, Paykull, 1789 [6]
 rivularis, *Trogophloeus*, Motschulsky, 1860
 [11]

rugosus, *Staphylinus*, Fabricius, 1775 [10]
scaber, *Stenus*, Fauvel, 1871 [1]
scitus, *Staphylinus*, Gravenhorst, 1806 [15]
sorbi, *Omalium*, Gyllenhal, 1810 [4]
splendens, *Staphylinus*, Fabricius, 1793 [13]

striatus, *Staphylinus*, Olivier, 1795 [17]
striatus, *Staphylinus*, Ström, 1768 [10]
testaceum, *Omalium*, Erichson, 1840 [8]
testaceum, *Omalium*, Gravenhorst, 1806 [4]
villosus, *Anthophagus*, Waltl, 1838 [5]

Details of the above names placed on the Official List of Specific Names in Zoology are given in Tables 1 and 2 as follows:

- (a) the specific names in column 2 of Table 1, as originally published in binomina with the generic names indicated in column 2, are given precedence over the specific names in column 3, whenever they are considered to be synonyms;
- (b) the specific names in column 2 of Table 2, as originally published in binomina with the generic names in column 4 of Table 2, are not invalid by reason of being junior primary homonyms of the specific names in column 3 of Table 2;
- (c) the following names, as published in binomina with the generic names indicated, usage maintained under Article 23.9.2 as nomina protecta:
 - (i) *plagiatus*, *Quedius*, Mannerheim, 1843 [14]
 - (ii) *angusticollis*, *Lesteva*, Mannerheim, 1830 [2]

History of Case 3231

An application to conserve the use of 17 specific names for rove beetles (family STAPHYLINIDAE) threatened by senior (or, in three cases, junior) synonyms, was received from Lee H. Herman (*American Museum of Natural History, New York, N.Y., U.S.A.*) on 6 January 2002. After correspondence the case was published in BZN 59: 256–268 (December 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote on the proposals published in BZN 59: 257. At the close of the voting period on 1 June 2004 the votes were as follows: 17 Commissioners voted FOR the proposals, 3 Commissioners voted AGAINST, 1 Commissioner abstained. Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

In abstaining, Alonso-Zarazaga commented that 'this mass voting precludes the Commissioners from accomplishing their task, i.e., knowing the facts related to each name and voting each name in a separate way. I am opposed to the admission and publication of these massive applications on unrelated names, whose stories have no common link. Consequently, I abstain'.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

abbreviatus, *Carabus*, Fabricius, 1779, *Reise nach Norwegen mit Bemerkungen aus der Naturhistorie und Oekonomie*, p. 263.
analisis, *Staphylinus*, Fabricius, 1787, *Mantissa insectorum* . . . , vol. 1, p. 221.

- angularis*, Staphylinus, Paykull, 1800, *Fauna Suecica. Insecta*, vol. 3, p. 395.
- angusticollis*, Lesteva, Mannerheim, 1830, *Précis d'un nouvel arrangement de la famille des brachélytres de l'ordre des insectes coléoptères*, p. 56.
- antilope*, Bledius, Peyron, 1858, *Annales de la Société Entomologique de France*, (3)6: 431.
- assimilis*, Philonthus, Nordmann, 1837, *Symbolae ad monographiam staphylinorum*, p. 78.
- cursor*, Staphylinus, O. Müller, 1776, *Zoologiae Danicae prodromus, seu animalium Daniae et Norvegiae indigenarum characteres*, p. 97.
- flavipes*, Staphylinus, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 423.
- fulgidus*, Staphylinus, Fabricius, 1787, *Mantissa insectorum* . . . , vol. 1, p. 220.
- fulgidus*, Staphylinus, Fabricius, 1793, *Entomologiae Systematicae* . . . , vol. 1, part 2, p. 525.
- glaber*, Staphylinus, O. Müller, 1776, *Zoologiae Danicae prodromus, seu animalium Daniae et Norvegiae indigenarum characteres*, p. 98.
- graellsii*, Bledius, Fauvel, 1865, *Bulletin de la Société Linnéenne de Normandie*, 9: 309.
- imhoffii*, Omalium, Heer, 1839, *Fauna coleopterorum Helvetica*, vol. 1, part 3, p. 184.
- iracundus*, Staphylinus, Say, 1830, *Descriptions of new species of North American insects, and observations on some already described*, p. 35.
- italicus*, Stenus, Baudi, 1870, *Berliner Entomologische Zeitschrift*, 13(1869): 397.
- longipenne*, Anthobium, Erichson, 1839, *Die Käfer der Mark Brandenburg*, vol. 1, part 2, p. 640.
- longipenne*, Anthobium, Stephens, 1834, *Illustrations of British entomology* . . . Mandibulata, vol. 5, p. 342.
- niger*, Staphylinus, O. Müller, 1764, *Fauna Insectorum Fridrichsdalina, sive methodica descriptio insectorum agri Fridrichsdalensis*, p. 23.
- obscurus*, Carpelinus, Stephens, 1834, *Illustrations of British entomology* . . . Mandibulata, vol. 5, p. 326.
- penetrans*, Staphylinus, O. Müller, 1776, *Zoologiae Danicae prodromus, seu animalium Daniae et Norvegiae indigenarum characteres*, p. 97.
- picipennis*, Staphylinus, Fabricius, 1793, *Entomologiae Systematicae* . . . , vol. 1, part 2, p. 521.
- plagiatus*, Quedius, Mannerheim, 1843, *Bulletin de la Société Impériale des Naturalistes de Moscou*, 16(2): 231.
- planus*, Staphylinus, Paykull, 1792, *Monographia Curculionum Suecia*, p. 145.
- punctata*, Lesteva, Erichson, 1839, *Die Käfer der Mark Brandenburg*, vol. 1, part 2, p. 618.
- pygmaeum*, Omalium, Gravenhorst, 1806, *Monographia Coleopterorum Micropterorum*, p. 206.
- rivularis*, Staphylinus, Paykull, 1789, *Monographia Staphylinorum Sueciae*, p. 65.
- rivularis*, Trogophloeus, Motschulsky, 1860, *Bulletin de la Société Impériale des Naturalistes de Moscou*, 33(2): 552.
- rugosus*, Staphylinus, Fabricius, 1775, *Systema Entomologiae*, p. 267.
- scaber*, Stenus, Fauvel, 1871, *Bulletin de la Société Linnéenne de Normandie*, (2)5: 20.
- scitus*, Staphylinus, Gravenhorst, 1806, *Monographia Coleopterorum Micropterorum*, p. 50.
- sorbi*, Omalium, Gyllenhal, 1810, *Insecta Suecica descripta*, vol. 1, part 2, p. 206.
- splendens*, Staphylinus, Fabricius, 1793, *Entomologiae Systematicae* . . . , vol. 1, part 2, p. 523.
- striatus*, Staphylinus, Olivier, 1795, *Entomologie ou Histoire Naturelle des Insectes* . . . Coléoptères. 3, genus 42, p. 28.
- striatus*, Staphylinus, Ström, 1768, *Det Kongelige Norske Videnskabs Selskabs Skrifter*, 4: 333.
- testaceum*, Omalium, Erichson, 1840, *Genera et species Staphylinorum insectorum coleopterorum familiae*, vol. 1, p. 885.
- testaceum*, Omalium, Gravenhorst, 1806, *Monographia Coleopterorum Micropterorum*, p. 218.
- villosus*, Anthophagus, Waltl, 1838, *Isis, encyclopädische Zeitschrift, vorzüglich für Naturgeschichte, vergleichende Anatomie und Physiologie*, p. 268.

Table 1. 17 conserved specific names (synonyms) placed on the Official List of Specific Names in Zoology. Names are arranged in alphabetical order within subfamilies and the numbers applied to them have relevance only within the table.

No. (column 1)	Synonym (junior unless otherwise stated) conserved (column 2)	Synonym(s) (senior unless otherwise stated) not given priority or precedence (column 3)
Subfamily STENINAE		
1	<i>Stenus scaber</i> Fauvel, 1871 (p. 20)	1. <i>Stenus italicus</i> Baudi, 1870 (p. 397) 2. <i>Stenus bituberculatus</i> Motschulsky, 1857 (p. 511)
Subfamily OMALIINAE		
2	<i>Anthophagus angusticollis</i> (Mannerheim, 1830, p. 56) (= nomen protectum in relation to <i>A. fulvus</i>) Species originally described in the genus <i>Lesteva</i> Latreille, 1797	1. <i>Anthophagus abbreviatus</i> (Fabricius, 1779, p. 263) Species originally described in the genus <i>Carabus</i> Linnaeus, 1758 2. <i>Anthophagus fulvus</i> (De Geer, 1774, p. 25) another senior synonym of <i>A. angusticollis</i> has not been used since 1789 (= nomen oblitum) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758
3	<i>Eusphalerum longipenne</i> (Erichson, 1839, p. 640) Species originally described in the genus <i>Anthobium</i> Leach, 1819 = senior synonym	<i>Eusphalerum imhoffii</i> (Heer, 1839, p. 184) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802= junior synonym
4	<i>Eusphalerum sorbi</i> (Gyllenhal, 1810, p. 206) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802	<i>Eusphalerum testaceum</i> (Gravenhorst, 1806, p. 218) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802
5	<i>Lesteva punctata</i> Erichson, 1839 (p. 618)	<i>Lesteva villosa</i> (Waltl, 1838, p. 268) Species originally described in the genus <i>Anthophagus</i> Gravenhorst, 1802
6	<i>Omalium rivulare</i> (Paykull, 1789, p. 65) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	<i>Omalium cursor</i> (O. Müller, 1776, p. 97) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758
7	<i>Phloeostiba plana</i> (Paykull, 1792, p. 145) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	<i>Phloeostiba flavipes</i> (Linnaeus, 1758, p. 423) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758
8	<i>Xylodromus testaceus</i> (Erichson, 1840, p. 885) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802	<i>Xylodromus pygmaeus</i> (Gravenhorst, 1806, p. 206) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802
Subfamily OXYTELINAE		
9	<i>Bledius graellsii</i> Fauvel, 1865 (p. 309)	<i>Bledius antilope</i> Peyron, 1858 (p. 431)
10	<i>Anotylus rugosus</i> (Fabricius, 1775, p. 267) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	<i>Anotylus striatus</i> (Ström, 1768, p. 333) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758

Table 1. continued.

No. (column 1)	Synonym (junior unless otherwise stated) conserved (column 2)	Synonym(s) (senior unless otherwise stated) not given priority or precedence (column 3)
11	<i>Carpelimus rivularis</i> (Motschulsky, 1860, p. 552) Species originally described in the genus <i>Trogophloeus</i> Mannerheim, 1830	<i>Carpelimus obscurus</i> Stephens, 1834 (p. 326)
Subfamily STAPHYLININAE		
12	<i>Ocybus picipennis</i> (Fabricius, 1793, p. 521) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	<i>Ocybus penetrans</i> (O. Müller, 1776, p. 97) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758
13	<i>Philonthus splendens</i> (Fabricius, 1793, p. 523) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	<i>Philonthus niger</i> (O. Müller, 1764, p. 23) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758
14	<i>Quedius plagiatus</i> Mannerheim, 1843, p. 231 (= nomen protectum in relation to <i>Q. flavopterus</i>)	1. <i>Quedius glaber</i> (O. Müller, 1776, p. 98) 2. <i>Quedius flavopterus</i> (Geoffroy, 1785, p. 166) another senior synonym of <i>Q. plagiatus</i> has not been used since 1840 (= nomen oblitum) Both species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758
15	<i>Quedius scitus</i> (Gravenhorst, 1806, p. 50) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	<i>Quedius analis</i> (Fabricius, 1787, p. 221) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758
16	<i>Quedius fulgidus</i> (Fabricius, 1793, p. 525) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = senior synonym	1. <i>Quedius assimilis</i> (Nordmann, 1837, p. 78) 2. <i>Q. rufitarsis</i> (Marshall, 1802, p. 512) (synonymy with <i>Q. fulgidus</i> cited as invalid in recent years) 3. <i>Q. iracundus</i> (Say, 1830, p. 35), cited as a valid name a few times since 1899 4. <i>Q. fuscipennis</i> (Block, 1799, p. 116), cited as a valid name only once (in 1996) since 1899. This name was declared a nomen oblitum in relation to 1. above in 2000. Species 1 was originally described in the genus <i>Philonthus</i> Stephens, 1829; species 2, 3 & 4 were originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = junior synonyms
Subfamily TACHYPORINAE		
17	<i>Carphaxis striatus</i> (Olivier, 1795, genus 42, p. 28) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = senior synonym	<i>Carphaxis angularis</i> (Paykull, 1800, p. 395) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = junior synonym

Table 2. 4 conserved specific names (junior primary homonyms) placed on the Official List of Specific Names in Zoology.

Names are arranged in alphabetical order within subfamilies and the numbers applied to them have relevance only within the table.

No. (column 1)	Junior homonym conserved (column 2)	Senior homonym (column 3)	Genus in which originally described (column 4)
Subfamily OMALIINAE			
1	<i>Eusphalerum longipenne</i> (Erichson, 1839, p. 640)	<i>Anthobium longipenne</i> Stephens, 1834 (p. 342)	<i>Anthobium</i> Leach, 1819
2	<i>Xylodromus testaceus</i> (Erichson, 1840, p. 885)	<i>Eusphalerum testaceum</i> (Gravenhorst, 1806, p. 218)	<i>Omalium</i> Gravenhorst, 1802
Subfamily STAPHYLININAE			
3	<i>Quedius fulgidus</i> (Fabricius, 1793, p. 525)	<i>Gauropterus fulgidus</i> (Fabricius, 1787, p. 220)	<i>Staphylinus</i> Linnaeus, 1758
Subfamily TACHYPORINAE			
4	<i>Carphacis striatus</i> (Olivier, 1795, genus 42, p. 28)	<i>Anotylus striatus</i> (Ström, 1768, p. 333)	<i>Staphylinus</i> Linnaeus, 1758

OPINION 2087 (Case 3130)***Pelastoneurus* Loew, 1861 (Insecta, Diptera): conserved**

Abstract. The Commission has conserved the name *Pelastoneurus* Loew, 1861 for a genus of predaceous flies (family DOLICHOPODIDAE). The name was threatened by a little used senior synonym *Paracleius* Bigot, 1859.

Keywords. Nomenclature; taxonomy; DOLICHOPODIDAE; *Pelastoneurus*; *Pelastoneurus vagans*; Nearctic, Neotropical, Afrotropical and Oriental regions.

Ruling

- (1) Under the plenary power the generic name *Paracleius* Bigot, 1859 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Pelastoneurus* Loew, 1861 (gender: masculine), type species by subsequent designation by Coquillett (1910) *Pelastoneurus vagans* Loew, 1861, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *vagans* Loew, 1861, as published in the binomen *Pelastoneurus vagans* (specific name of the type species of *Pelastoneurus* Loew, 1861) is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name *Paracleius* Bigot, 1859, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 3130

An application to conserve the name *Pelastoneurus* Loew, 1861 for a genus of predaceous flies (family DOLICHOPODIDAE), distributed in the Nearctic, Neotropical, Afrotropical and Oriental regions, was received from Scott E. Brooks and Terry A. Wheeler (Lyman Entomological Museum and Research Laboratory, McGill University (Macdonald Campus), Ste-Anne-de-Bellevue, Quebec, Canada) and Neal L. Evenhuis (Bishop Museum, Hawaii, U.S.A.) on 17 May 1999. After correspondence the case was published in BZN 59: 196–197 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. A comment in support of the application was published in BZN 60: 53–54.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 197. At the close of the voting period on 1 March 2004 the votes were as follows: 21 Commissioners voted FOR the proposals, 1 Commissioner voted AGAINST, 1 Commissioner abstained, Calder and Ng were on leave of absence.

Voting against, Štys commented that there is no reason for the suppression of *Paracleius* Bigot, 1859 since the threat to the widely used name *Pelastoneurus* Loew, 1861 is only potential. The authors of the application refer only to catalogue statements that *Dolichopus heteroneurus* Macquart, 1850 (an unrecognisable type

species of *Paracleius*) is congeneric with *Pelastoneurus* spp. Conditional suppression of the senior subjective synonym would have been preferable.

In abstaining, Bouchet commented that the asymmetrical presentation of the facts regarding the two generic names involved did not allow an informed vote. In para. 1, it was stated that there is no extant type material of *Dolichopus heteroneurus* Macquart, 1850, the type species of *Paracleius*. In para. 2, it was stated that the type species of *Pelastoneurus* is *P. vagans* Loew, 1861, but we do not know whether type material exists. We know that *P. vagans* is from the New World, but we do not know the geographical location of *D. heteroneurus*.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Paracleius Bigot, 1859, *Annales de la Société Entomologique de France*, (3)7: 215, 227.

Pelastoneurus Loew, 1861, *Neue Beiträge zur Kenntniss der Dipteren*, Beitrag 8, p. 36.

vagans, *Pelastoneurus*, Loew, 1861, *Neue Beiträge zur Kenntniss der Dipteren*, Beitrag 8, p. 39.

The following is the reference for the designation of *Pelastoneurus vagans* Loew, 1861 as the type species of the nominal genus *Pelastoneurus* Loew, 1861:

Coquillett, D.W. 1910. *Proceedings of the United States National Museum*, 37: 586.

OPINION 2088 (Case 3221)***Opomyza* Fallén, 1820 (Insecta, Diptera): usage conserved by designation of a neotype for its type species *Musca germinationis* Linnaeus, 1758**

Abstract. The Commission has designated a neotype for *Musca germinationis* Linnaeus, 1758, the type species of *Opomyza* Fallén, 1820, in order to conserve the usage of the generic name for a group of Holarctic flies (family OPOMYZIDAE).

Keywords. Nomenclature; taxonomy; OPOMYZIDAE; *Opomyza*; *Opomyza germinationis*; flies; Holarctic.

Ruling

- (1) Under the plenary power all previous type fixations for *Musca germinationis* Linnaeus, 1758 are hereby set aside and the specimen labelled '*Opomyza germinationis* ♂ 2.7' in the Naturhistoriska Riksmuseet, Stockholm, is designated as the neotype.
- (2) The name *Opomyza* Fallén, 1820 (gender: feminine), type species by subsequent designation by Westwood (1840) *Musca germinationis* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *germinationis* Linnaeus, 1758, as published in the binomen *Musca germinationis* and as defined by the neotype designated in (1) above (specific name of the type species of *Opomyza* Fallén, 1820), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3221

An application to conserve the accepted understanding and usage of the generic name *Opomyza* Fallén, 1820 for a group of Holarctic flies (family OPOMYZIDAE) by designating a neotype for its type species *Musca germinationis* Linnaeus, 1758 was received from Jan Willem A. van Zuijlen (*Waalwijk, The Netherlands*), Paul L. Th. Beuk (*Zoological Museum, Amsterdam, The Netherlands*) and Emilia P. Nartshuk (*Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia*) on 22 October 2001. After correspondence the case was published in BZN 59: 269–272 (December 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote on the proposals published in BZN 59: 271. At the close of the voting period on 1 June 2004 the votes were as follows: 21 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

germinationis, *Musca*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 600.

Opomyza Fallén, 1820, *Opomyzides Sveciae*, p. 10.

The following is the reference for the designation of *Musca germinationis* Linnaeus, 1758 as the type species of *Opomyza* Fallén, 1820:

Westwood, J.O. 1840. *An introduction to the modern classification of insects*, p. 152.

OPINION 2089 (Case 3203)***Sauripterus* Hall, 1843 (Osteichthyes, Sarcopterygii): conserved as the correct original spelling**

Abstract. The Commission has ruled that *Sauripterus* Hall, 1843 is the correct original spelling for a fossil fish (family RHIZODONTIDAE). Stability was threatened by the unused earlier spelling *Sauritolepis* Hall, 1840.

Keywords. Nomenclature; taxonomy; Sarcopterygii; Rhizodontida; *Sauripterus*; *Sauripterus taylori*; fossil fish; Catskill Formation; Devonian.

Ruling

- (1) Under the plenary power it is hereby ruled that:
 - (a) the generic name *Sauritolepis* Hall, 1840 is suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) *Sauripteris* is an incorrect original spelling of *Sauripterus* Hall, 1843.
- (2) The name *Sauripterus* Hall, 1843 (gender: masculine), type species *Sauritolepis taylori* Hall, 1840 by monotypy of the replaced nominal genus *Sauritolepis* Hall, 1840, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *taylori* Hall, 1840, as published in the binomen *Sauritolepis taylori* and as defined by the lectotype designated by Jeffery et al., 2002 (catalogue no. AMNH 3341 in the American Museum of Natural History, New York), (specific name of the type species of *Sauripterus* Hall, 1843) is hereby placed on the Official List of Specific Names in Zoology.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
 - (a) *Sauritolepis* Hall, 1840, as suppressed in (1)(a) above;
 - (b) *Sauripteris* Hall, 1843, as ruled in (1)(b) above to be an incorrect original spelling of *Sauripterus* Hall, 1843.

History of Case 3203

An application to conserve *Sauripterus* Hall, 1843 as the correct original spelling for a fossil fish (family RHIZODONTIDAE) was received from J.E. Jeffery (*Instituut voor Evolutionaire en Ecologische Wetenschappen, Universiteit Leiden, Leiden, The Netherlands*), M.C. Davis and N.H. Shubin (*University of Chicago, Chicago, IL, U.S.A.*) and E.B. Daeschler (*Academy of Natural Sciences of Philadelphia, Philadelphia, PA, U.S.A.*) on 3 May 2001. After correspondence the case was published in BZN 59: 198–202 (September 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

The author of *Sauritolepis taylori* is Hall (1840) not Hall (1843) as cited in paras. 6 and 7 of the application.

Decision of the Commission

On 1 December 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 200. At the close of the voting period on 1 March

2004 the votes were as follows: 19 Commissioners voted FOR the proposals, 4 Commissioners voted AGAINST, Calder and Ng were on leave of absence.

Voting against, Alonso-Zarazaga commented that the spelling *Sauripterus* is not in common usage and that *Sauripteris* should be maintained and *Sauritolepis* Hall, 1840 not used. Also voting against, Štys commented that important modern works (quoted in para. 5 of the application) use the correct original spelling, *Sauripteris* Hall, 1843. So, usage of the unjustified emendation *Sauripterus* Woodward, 1891 is by no means universal, and it should not be deemed to be a justified emendation under Article 33.2.3.1.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Sauripteris Hall, 1843, *Natural History of New York; Geology of New-York, part 4, comprising the Survey of the Fourth Geological District*, pp. 281–282.

Sauripterus Hall, 1843, *Natural History of New York; Geology of New-York, part 4, comprising the Survey of the Fourth Geological District*, pp. 281–282.

Sauritolepis Hall, 1840, *Fourth Annual Report of the Survey of the Fourth Geological District. Assembly Document, Albany Institute*, **50**: 453.

taylori, *Sauritolepis*, Hall, 1840, *Fourth Annual Report of the Survey of the Fourth Geological District. Assembly Document, Albany Institute*, **50**: 453.

The following is the reference for the designation of the lectotype of *Sauritolepis taylori* Hall, 1840:

Jeffery, J.E., Davis, M.C., Shubin, N.H. & Daeschler, E.B. 2002. *Bulletin of Zoological Nomenclature*, **59**: 199.

OPINION 2090 (Case 3196)***Ctenotus decaneurus yampiensis* Storr, 1975 (currently *C. yampiensis*; Reptilia, Sauria): neotype designated**

Abstract. The Commission has designated a neotype for the Western Australian skink species *Ctenotus yampiensis* Storr, 1975 (family SCINCIDAE). Storr inadvertently designated a specimen of *C. militaris* Storr, 1975 as the holotype of *C. decaneurus yampiensis*, thus making the subspecific name a synonym of *C. militaris*. The established usage of these names is conserved by the designation of a specimen labelled 'type of *Ctenotus yampiensis*' by Storr, WAM R11741, as the neotype.

Keywords. Nomenclature; taxonomy; Reptilia; Sauria; Lacertilia; SCINCIDAE; *Ctenotus*; *Ctenotus yampiensis*; *Ctenotus militaris*; skinks; Western Australia.

Ruling

- (1) Under the plenary power all previous type fixations for the nominal species *Ctenotus yampiensis* Storr, 1975 are hereby set aside and the specimen labelled as the 'type of *Ctenotus yampiensis*' from Wotjulum, West Kimberley, Western Australia in the Western Australian Museum, registration number R11741, is designated as the neotype.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *militaris* Storr, 1975, as published in the binomen *Ctenotus militaris* and as defined by the holotype in the Western Australian Museum, registration number R40779;
 - (b) *yampiensis* Storr, 1975, as published in the trinomen *Ctenotus decaneurus yampiensis* and as defined by the neotype designated in (1) above.

History of Case 3196

An application to designate a neotype for the Western Australian skink species *Ctenotus yampiensis* Storr, 1975 (family SCINCIDAE), because the author inadvertently designated a specimen of *C. militaris* Storr, 1975 as the holotype of *C. decaneurus yampiensis*, thus making the subspecific name a synonym of *C. militaris*, was received from L.A. Smith (*Western Australian Museum, Perth, Western Australia, Australia*) on 19 February 2001. After correspondence the case was published in BZN 59: 273–274 (December 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2004 the members of the Commission were invited to vote on the proposals published in BZN 59: 274. At the close of the voting period on 1 June 2004 the votes were as follows: 19 Commissioners voted FOR the proposals, 2 Commissioners voted AGAINST, Bouchet, Calder and Ng were on leave of absence, no vote was received from Macpherson.

Voting against, Mahnert commented that 'prevailing usage' should not overtake the Principle of Priority in this case. Too many errors are associated with the name *C. yampiensis*, which is clearly a synonym of *C. militaris*. Also voting against, Štys commented that the curatorial efforts to have everything in order precedes taxonomic study and consequently the ruling of the Commission could have some unexpected taxonomic side-effects. The request seems premature.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

militaris, Ctenotus, Storr, 1975, *Records of The Western Australian Museum*, **3**: 231.

yampiensis, Ctenotus decaneurus, Storr, 1975, *Records of The Western Australian Museum*, **3**: 235.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described ...'. The Abstract will be prepared by the Commission's Secretariat.

References. These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in BZN 59: 159–160.

Submission of Application. One copy should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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NHREF



The Bulletin of Zoological Nomenclature



*[ICZN] The Official Periodical
of the International Commission
on Zoological Nomenclature*



THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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The Executive Secretary,
International Commission on Zoological Nomenclature,
Natural History Museum,
Cromwell Road,
London, SW7 5BD, U.K. (Tel. 020 7942 5653)
(e-mail: iczn@nhm.ac.uk)
(<http://www.iczn.org>)

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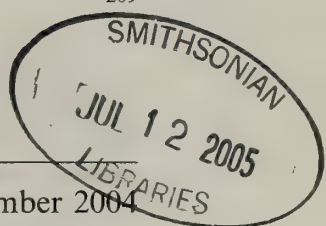
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**BULLETIN OF ZOOLOGICAL NOMENCLATURE**

Volume 61, part 4 (pp. 209–276)

17 December 2004

Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume), as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be by e-mail to 'iczn@nhm.ac.uk' where possible.

(2) The Commission votes on applications six to eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to 'join-iczn-list@lyris.bishopmuseum.org', leaving the subject line and body of the message blank (for further details see BZN 59: 234).

(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 61, part 3, September 2004) went to press. Under Article 82 of the Code, existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 3326: *Lachniella tujafilina* Del Guercio, 1909 (Insecta, Hemiptera, APHIDIDAE): proposed precedence over *Lachnus greeni* Schouteden, 1905. J.M. Nieto Nafria, N. Pérez Hidalgo & M. Alonso-Zarazaga.

CASE 3327: Amyot, C.J.B. 1845–1847. *Entomologie Française, Rhynchotes, Méthode Mononymique*: proposed addition to Opinion 686. I.M. Kerzhner.

CASE 3328: *Cryptotis* Pomel, 1848 (Mammalia, Insectivora, SORICIDAE): proposed placement on the Official List of Generic Names in Zoology; and *Didelphis* Linnaeus, 1758 (Mammalia, Insectivora, DIDELPHIDAE): proposed correction of gender. A.L. Gardner.

CASE 3329: *Mycetoporus forticornis* Fauvel, 1875 (Insecta, Coleoptera): proposed conservation of the specific name. M. Schülke.

CASE 3330: *Nectarinia cruentata* Rüppell, 1845 (Aves, Passeriformes): proposed conservation. F.D. Steinheimer.

Case 3331: *Cambalida coriacea* Simon, 1909 (Arachnida, Araneae): proposed conservation of the specific name. C.R. Haddad.

The International Commission on Zoological Nomenclature and its publications

The roles of the International Commission on Zoological Nomenclature and of the International Trust for Zoological Nomenclature are described in the *Bulletin of Zoological Nomenclature*, vol. 61, pages 2–6, together with details of the following publications and how to obtain them:

Bulletin of Zoological Nomenclature,
International Code of Zoological Nomenclature,
Official Lists and Indexes of Names and Works in Zoology,
Towards Stability in the Names of Animals—a History of the International Commission on Zoological Nomenclature 1895–1995.

Full details will be found on the Commission's website www.iczn.org.

Commission Website: Code and Official Lists and Indexes added

The International Code of Zoological Nomenclature and the Names and Works on the Official Lists and Indexes during the last four years have been placed on the Commission website (www.iczn.org). Details of how to purchase published copies of the Code and of earlier lists of the Official Lists and Indexes can be found on the Website or by e-mail to 'iczn@nhm.ac.uk'.

The website is now hosted by the Natural History Museum, London, by courtesy of the Director and Trustees and with the valued assistance of the Museum IT staff.

***Fauna Europaea* project meeting, Paris**

The final meeting of the *Fauna Europaea* project took place at the Muséum National d'Histoire Naturelle in Paris, France, from 25th to 27th September 2004. The Commission was strongly represented by Commissioners Alessandro Minelli, Miguel Alonso-Zarazaga and Philippe Bouchet and Executive Secretary Andrew Polaszek. The meeting was held in order to celebrate the completion of the project, which has successfully mapped all European animal species, as well as providing data on their taxonomy. Information can now be accessed at the *Fauna Europaea* website: <http://www.faunaeur.org>.

During the meeting, Andrew Polaszek gave a presentation entitled '*The future of zoological taxonomy—the role of the International Commission on Zoological Nomenclature*'. Attendance at the meeting by representatives of, among others, GBIF (Global Biodiversity Information Facility) Species2000, and many European museums, ensured much fruitful discussion concerning future collaborative projects between the Commission and these organizations.



Left to right: ICZN Executive Secretary Andrew Polaszek, Commissioners Prof Alessandro Minelli, Dr Miguel Alonso-Zarazaga, Prof Philippe Bouchet. Photo: Claire Basire

International Trust for Zoological Nomenclature

Financial Report for 2003

Continuation of the fall in the amount received from donations, which had averaged more than £22,000 per year for the 11 years of 1987–1997, is the main reason for the unfortunately large deficit of £13,540 for the year 2003. In fact in 2003 £3,131 was received in donations. Other income received was made up of £33,563 for all publications produced by the Commission (the *Bulletin of Zoological Nomenclature*, the *International Code of Zoological Nomenclature*, the *Official Lists and Indexes* and the *Centenary History of the Commission*), £3874 for the Appeal Fund, £9,334 in bank interest and investment income, and £6,372 capital gain from the sale of investments, bringing the total income for the year to £56,274.

Expenditures in 2003 were £52,524 for the salaries, fees and National Insurance of the Secretariat of the International Commission on Zoological Nomenclature (a reduction £2,851 from 2002). Other costs were £1,255 for launching the Appeal at the 20th Pacific Science Congress at Bangkok in March 2003, £10,714 for printing the *Bulletin of Zoological Nomenclature* and for the distribution of all publications, £2927 for printing the Appeal brochures, £1,959 for office expenses and £435 for depreciation of office equipment, bringing the total expenditure to £69,814.

The main work of the Commission during the year was on applications from zoologists in 17 countries to resolve problems of zoological nomenclature. These were published in the *Bulletin of Zoological Nomenclature*, together with Opinions (rulings) made by the Commission on other cases. Further applications were under consideration. Advice was given by the Commission's Secretariat in response to a large number of informal enquiries on matters of nomenclature from zoologists worldwide.

The Secretariat of the Commission was again housed in The Natural History Museum, London, whom we thank for their continuing support. The Trust wishes to express its thanks to the donors listed below who contributed to its work during the year. Continuation of the work of the Trust for the international zoological and palaeontological community is helped by the support received from its donors.

M. K. HOWARTH

Secretary and Managing Director

15 April 2004

List of donations and grants received during the year 2003

American Association for Zoological Nomenclature	£531
Canadian Society of Zoologists	88
International Union of Biological Sciences	2,388
Royal Danish Academy of Sciences and Letters	124
Total	£3,131

**INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED
31 DECEMBER 2003**

Income**SALE OF PUBLICATIONS**

Bulletin of Zoological Nomenclature	£27,542
International Code of Zoological Nomenclature	3,675
Royalties on Code	1,096
Official Lists and Indexes	1,146
Centenary History	104

33,563**APPEAL FUND** 3,874**GRANTS AND DONATIONS** 3,131**BANK AND INVESTMENT INTEREST** 9,334**CAPITAL GAIN ON SALE OF INVESTMENTS** 6,372

56,274**Expenditure****SALARIES, NATIONAL INSURANCE AND FEES** 52,524**OFFICE EXPENSES** 1,959**PRINTING OF BULLETIN AND DISTRIBUTION OF
PUBLICATIONS** 10,714**PRINTING OF APPEAL BROCHURES** 2,927**DEPRECIATION OF OFFICE EQUIPMENT** 435**CONFERENCE COSTS** 1,255

69,814**Deficit for the year** £13,540

The dating of names proposed in the first Supplement to Thomas Jerdon's *Catalogue of the birds of the peninsula of India*

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Abstract. Thirteen taxa thought by Jerdon to be new species were named in the first Supplement to Thomas Jerdon's *Catalogue of the birds of the peninsula of India*. The name of one of those thirteen, not now in synonymy, is usually dated as 1841. The others have virtually everywhere been dated 1844, at least since their listing by Baker in *The fauna of British India including Ceylon and Burma—Birds* (1930). The purpose of this paper is to explain how this has come about and to recommend that the earlier of the two dates (1841) be used consistently when any of these thirteen names is used. Our study has shown that, despite claims to the contrary, Jerdon did pre-print his Supplement; he did so in the form of a book, which appears to have been published in two parts.

The Madras Journal of Literature & Science

Jerdon's 'Catalogue' (Jerdon, 1839a, b, 1840a, b, c, d), his first major work on Indian birds, appeared in six successive issues of the *Madras Journal of Literature & Science* in 1839 and 1840: in issues 24 and 25 from the 1839 volume and in issues 26 to 29, these four issues making up the two 1840 volumes.

There were eventually two supplements to Jerdon's 'Catalogue'. Both appeared in the *Madras Journal of Literature & Science*, the first in 1844 (Jerdon, 1844) and the second (Jerdon, 1845) in a further issue of the same journal that is shown from the title page to Volume XIII to have been delayed until 1845. These two are respectively issues 30 and 31 of the journal.

The long delay between issue 29 and issue 30 is known to have been due to budget problems (see Anon., 1844). When the first supplement eventually appeared in 1844, the editors inserted a brief introductory note reading: 'In consequence of the

suspension of the Journal, this article was printed by the author and circulated among his friends—but has never hitherto been published'. To make space for this insert the first species account was evidently reset in smaller type: from which we deduce that the type for the journal article must have been set earlier, no doubt prior to 18 August 1841, when the decision was taken to suspend publication (Anon., 1844).

It is on the basis of the recorded date of issue 30 of the journal that authors citing new names from there have generally used the date 1844, and presumably the above editorial note has caused people to reject the idea of prior publication.

Why not accept 1844? Did Jerdon pre-publish his Supplement?

Were it not for the fact that imposing the date 1844 on the one obvious case that is dated 1841 would invalidate the Jerdon name in question, this would be the obvious course to take. For, as we explain below, this name is then preoccupied by a different specific name put forward by Blyth (1842c, p. 602).

Early in our study the central question that emerged was whether and how the information 'printed by the author and circulated among his friends' might relate to the provisions of the Code. Was there a 'preprint'? The Code validates names that are to be found in preprints, but it requires that such preprints be dated (Article 21.8). Or was it the advance distribution of a separate? Again, but only for names proposed in 1999 or earlier, the advance distribution of a separate can advance the date of publication (Article 21.8). Or is there some other answer?

Evidence of prior availability

To resolve our questions we needed evidence. The first clue was that Blyth (1842b) in a footnote to page 162 of the *Journal of the Asiatic Society of Bengal* recorded that 'Since the above was written, Mr. Jerdon has kindly favored me with a copy of the printed Supplement to his valuable Catalogue . . .'. This suggests a preprint, but Blyth gave no precise date and the date of his footnote is uncertain.

The numbered issues in this volume were Nos. 121–132. The paper by Blyth (1842b) is from the nominal February issue; Blyth's footnote could have been written as early as 'Feb. 26th. 1842', a date which appears at the end of his article on p. 195, or it could have been added somewhat later but still before the final manuscript went to the printers. No. 129, which was that for September, contained on page 890 a Blyth footnote dated 20 January 1843. Here, at least, the evidence shows a four-month delay. One may conclude that the footnote to the February issue would have appeared no later than May or June 1842. Next, we noted that the date 1841 was routinely cited by Gray (1848a, b, c). And we found that Gray cited page numbers for the relevant Jerdon names that he listed (see Table 1); page numbers that did not accord with the 1844 Supplement.

The nature of the evidence: the through-paginated book

Enquiries about a pre-print were made of the librarians at The Natural History Museum, but these yielded no immediate evidence. The search was widened to Edinburgh, because we knew of links between Jerdon and Jardine, and to Cambridge, where at least some of Jardine's library may be found. The librarians at the Balfour & Newton Library of the Department of Zoology, Cambridge University, rapidly found relevant material and were extremely helpful.

While we have seen no evidence of a dated pre-print and no evidence of the advance distribution of a separate, the evidence in Cambridge takes the form of a book that is through-paginated and includes the first, but not the second Supplement. Including the Supplement and the errata, this book contains 203 pages, and the pages cited by Gray (1848a, b, c) agree with this book. The book has its own title page. This shows that it was produced in 'Madras' by 'J.B. Pharoah' 'MDCCCXXXIX'. An unnumbered page or end paper says 'From the *Madras Journal of Literature & Science* Nos. 24, 25, 26, 27, 28, 29 & 30'. This, of course, demonstrates that the 1839 date on the title page is wrong. It also leaves us without a valid date of publication, unless we draw on secondary sources. Despite the assertion in 1844 by the Editors of the *Madras Journal of Literature & Science* it is clear that Jerdon did publish his supplement—in book form (we refer to this hereafter as the book). The title page shows the printers to have been the 'Athenæum Press—R. Hosie, Printer' and one can but conclude that J.B. Pharoah acted as Jerdon's publisher. In these circumstances, the date 1839 (the date specified) is quite evidently wrong and Article 21.2 of the Code allows for 'evidence to the contrary'.

Apart from through-pagination and a smaller type face, the book differs by including an opening section of 24 pages entitled 'A synoptical table of contents' which was evidently prepared specially for this work. On the evidence assembled we conclude that the editors of the *Madras Journal* deceived themselves and their readers in stating that Jerdon's Supplement although distributed had not been published. Nonetheless, it may have been agreed between them and Jerdon that the Supplement in the journal should be considered to be the first publication and such an agreement may have led to the editorial note. Jerdon never contested the note; but Jerdon (1863) did not use Blyth's name for what he had called *Megalurus striatus*. Most of Blyth's related comments and actions are consistent with this understanding, but not all are: he immediately recognised that *Dasyornis? locustelloides* Blyth was simply *Megalurus striatus* Jerdon.

Therefore, in accordance with the Code and the need for a consistent date for all new names in this work, we consider that the editors' comments must be discarded. Stability is best served by using the date 1841 and not 1844.

In evidence we put forward the date 1841 cited with appropriate pagination by Gray. Blyth's footnote, quoted above, provides but limited extra support showing that in early 1842 what must have been the book was already in his hands.

It is curious that we have not located the copy that Gray must have used. However two copies have now been found in Cambridge and we here provide details.

Copies of the through-paginated book, in whole or in part

The first copy found ('Newton's copy') was a bound volume with inserted interleaving on which some unidentified resident of Ceylon has made notes. By 1860 this copy was already in the hands of Alfred Newton (as evidenced by a notation in the copy), and may have already been cut down in dimensions to 133 mm. x 206 mm. and bound or perhaps rebound. This is the one copy we have found with continuous pagination right through to the end of the Supplement; however it begins with (pp. i-xxiv) a 'Synoptical Table of Contents for the Birds of the Peninsula of India' which never appeared in the journal.

The second copy ('Jardine's copy'), with page dimensions of 140 mm x 225 mm, is bound with other Jerdon papers and is incomplete. It contains pp. 1–140 through-paginated, then from the journal comes a title page for the 1840 issue, number 28, which began with the 15 page fifth part of Jerdon's catalogue—originally paginated [1]–15—and a title page of issue 29 which held the sixth part—originally paginated [193]–227, and finally a copy of the Synoptical Table mentioned above. This volume, which came from the Strickland library, shows Pharoah's title page which was inscribed for, and sent to, Sir William Jardine by Jerdon (but sadly Jerdon did not date this inscription). Jardine evidently passed on this copy to his son-in-law Hugh Strickland. Strickland died tragically in 1853, run over by a train while examining the geology of a railway cutting, and his bird collection was presented to the University of Cambridge in 1867 (Benson, 1999). His library seems to have reached Cambridge later, partly in 1875 and partly in 1881 (C. Castle, in litt.), both dates after Jardine's death. The fact that a distribution took place first of pp. 1–140 and later of the rest (including the Supplement) suggests to us that the book was not bound by J.B. Pharoah before its final distribution. We have found nothing in the literature before 1842 that might suggest when the first 140 pages were distributed but it seems likely this happened in late 1839 or in 1840. We have also scanned the Indian journals of the day for a notice of publication or a review, but we have traced neither. All these pages appeared in through-paginated form after they had appeared in the *Madras Journal*, in which the Synopsis did not appear.

We now know of a third copy, and of what may be a fourth. Mrs. F.E. Warr, alerted to our search, remembered an instance where a 'Jerdon MS' was offered to The Natural History Museum, London, from the library of J.G. van Marle, when this was put up for sale by A.L. van Gendt & Co. BV, in 1980, and she found museum notes about this. A reference in the Gendt sale catalogue mentioned a copy in the McGill Library, Montreal, listed by Casey Wood (1931).

Enquiries of the Librarian in Montreal, show that this copy, now in what is called the Blacker-Wood Library of Biology, is a mixed set lacking the supplement but beginning with the 1839 title page. The set comprises 140 pages continuously numbered plus separates or reprints from *Madras Journal* issues 28 and 29, with pagination as in the journal. This third copy, which essentially matches the 'Jardine' copy in Cambridge, once belonged to Thomas Horsfield. It can be seen from page numbers cited by Horsfield & Moore (1854)—see Table 1—that they referred to it erratically and apparently without fully understanding how it differed from the original parts. As this copy did not include the Supplement one would expect all their citations to refer to the journal in 1844. This is true although there is one case where, possibly due to a typographic error, they cite a page number that would be right for the 1841 book.

The van Marle holding is probably a fourth copy. It was not sold at auction; The Natural History Museum rejected the proposed purchase from van Gendt & Co., seeing no special significance in the work offered. This, the book once in their hands, was possibly sold later by van Gendt's antiquarian bookshop, but no record of the sale can be traced (R. de Ruiter in litt.).

We believe a fifth copy was once in Gray's hands. Finally, Elliot (1873) listed Jerdon's major works as including a '*Catalogue of the Birds of the Peninsula of India*, 8vo. Madras: J.B. Pharoah, 1839, pp. 203'. Sir Walter Elliot was a friend of Jerdon

of many years standing. He had been present at the meeting in Madras in August 1841 where the printing of issue 30 of the *Madras Journal* was postponed (Anon., 1844). It is more than likely that Elliot had his own copy. Blyth must have had a copy, which may have survived in Calcutta.

It seems clear that Baker never saw the book (see Table 1).

The printing and distribution of Jerdon's book

The McGill (Horsfield) and Jardine copies clearly suggest that printing of the through-paginated book was not a single exercise.

It began with the first 140 pages (or with a smaller part—as hinted at by the retention of the date 1839 on the title page) and, as exemplified by the Newton copy, was completed through one or more additional printings of the pages from 141 to the end. We shall be interested to hear of any other copies that exist, and how they are made up, as we still have no idea of the size of the print run.

We note with interest that it appears that neither Jardine nor Horsfield received pages numbered 141–203. Elliot (1873) reported that Jerdon was 'deficient in habits of order and method' (p. 151) and that his regimental movements combined with 'habitual carelessness' led to the loss or destruction of specimens (p. 150). We thus assume that Jerdon kept no record of those to whom he had sent pages 1–140 and that he was indifferent to whether they received these pages or not, so that some of his correspondents received regular separates from the journal instead.

The specific case of *Chaetornis striatus* (Jerdon, 1841)

The case that causes us to recommend the uniform adoption of the date 1841 for Jerdon's first 'Supplement', in its book form, is that of *Megalurus ? striatus* Jerdon, 1841. In the 1844 Supplement this appeared on page 169. In the book it appears on p. 198. It is the latter page number, together with the date 1841 that Gray (1848a: 165) cited when erecting the genus *Chaetornis* with this as his type species.

Blyth (1842c, p. 602) described the same species, based not on Jerdon's material but on a specimen obtained 'in the bazaar', as *Dasyornis ? locustelloides*. Before letting this go to print Blyth added a footnote reading 'It is, I now find, the *Megalurus ? striatus* of Mr. Jerdon's Supplement, a single specimen having been procured by that naturalist in the Neilgherries'. Horsfield & Moore (1854: 330) called it *Chaetornis striatus* Jerdon, 1841; Jerdon (1863: 72) used *Chaetornis striatus*. However, Oates (1889: 388) called it *Chaetornis locustelloides* Blyth, 1842, and listed Jerdon's name from its eventual 1844 publication in the Journal. So did Baker (1924: 438), but later (1930a: 179; 1930b: 640) he reverted to *Chaetornis striatus* (Jerdon, 1841), writing that this antedated *locustelloides* Blyth. But our search suggests that Baker made no attempt to correct to 1841 the dates of other names from the Supplement. And the present inconsistent state of affairs is due to later authors (e.g. Ripley, 1961, 1982) simply following Baker (1930).

Other names historically not always dated 1844

The names *Buteo punctatus* and *Bulaca monticola* appear in synonymy in Hodgson (1843) where they were introduced by Blyth with reference to Jerdon's Supplement. As their placements in synonymy may be construed as providing 'indications' it could be argued that these two names should be credited to Blyth in Hodgson, 1843, as was

suggested for the second of these names by Baker (1930a: 379). Accepting that Jerdon's Supplement was published within the 1841 book removes any need to account for these entries in synonymy by awarding them priority with Jerdon as the author.

No other names proposed by Jerdon (1841) for species pose problems. In no case does advancing their date from 1844 to 1841 affect stability (see right hand column Table 1).

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Comments on this article are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Table 1. Evidence from the investigation of names first used in Jerdon's "Supplement" and implications

Jerdon's generic name	Jerdon's specific name	Page in 1844	Page in 1841	Gray 1848 a	Gray 1848 b, c	Horsfield & Moore (1854)	Baker (1930)	Remarks
						Page in above, plus data there cited	Page in above, plus data there cited	ND = no date given
<i>Nisaetus</i> ??	<i>ovivorus</i>	157	190		190	382– 1844: 158	408– Suppl., privately circulated	Gray (1848b) also listed <i>Ictinaetus malayensis</i> from Jerdon, 1844 p. 117, which is from the 2nd. Supplement. Baker (1930a: 408) listed <i>Ictinaetus ovivorus</i> (not <i>Nisaetus</i>), citing Blyth ('1843': 128 = 1842a: 128), which was taken from Jerdon's Supplement 'privately circulated' (i.e. the book). The name <i>ovivorus</i> Jerdon, 1841 is a junior synonym of <i>Ictinaetus malayensis perniger</i> (Hodgson, 1836).
<i>Spizaetus</i>	<i>punctatus</i>	164	195			34– no details given	406– 1844: 164	The name <i>punctatus</i> Jerdon, 1841 is a junior synonym of <i>Aquila [pomarina] hastata</i> (Lesson, 1831). Peters (1931: 256) and subsequent authors, including Stresemann & Amadon (1979: 379) have erred in dating Lesson's name from 1834, see Browning & Monroe (1991).
<i>Buteo</i>	<i>rufiventer</i>	165	195		195	not listed	not listed	Gray (1848b: 33) considered <i>rufiventer</i> Jerdon, 1841 a junior synonym of <i>Buteo rufinus</i> (Cretzschmar, 1829).
<i>Buteo</i>	<i>melanotis</i>	166	196		196	50– ND: 196	410– 1844: 166	Baker (1930a: 410) wrongly cited the name as <i>melanotis</i> not <i>melanotis</i> . <i>Buteo melanotis</i> Jerdon, 1841 is a junior synonym of <i>Spilornis cheela</i> (Latham, 1790). For a comment on the generic name <i>Hematornis</i> employed by Baker see McAllan & Bruce (2002: 167).

Table 1. *Continued*

Jerdon's generic name	Jerdon's specific name	Page in 1844	Page in 1841	Gray 1848 a	Gray 1848 b, c	Horsfield & Moore (1854) Page in above, plus data there cited	Baker (1930) Page in above, plus data there cited	Remarks ND=no date given
<i>Bulaca</i>	<i>Monticola</i>	167	197		197	83– ND: 167	379– ‘Suppl.’ ND	In the book spelled with a small <i>m</i> for <i>monticola</i> . Baker (1930a: 379) attributed his source for the citation to Blyth (1843: 312), where Blyth introduced it as a synonym. <i>Bulaca monticola</i> Jerdon, 1841 is a junior synonym of <i>Strix leptogrammica indrance</i> Sykes, 1832.
<i>Megalurus?</i>	<i>striatus</i>	169	198	198		330– 1841 (no page); 1844 p. 169.	179–1841 no page; 640–1841	<i>Megalurus striatus</i> Jerdon, 1841, now <i>Chaetornis striatus</i> (Jerdon, 1841), has <i>Dasyornis locustelloides</i> Blyth, 1842 as a junior synonym.
<i>Thimalia</i> [sic]	<i>poioicephala</i>	169	198			not listed	55– 1844: 169	Erroneously given in Baker's text (1930a: 55) and index (1930b: 794) as <i>poiocephala</i> . See <i>Alcippe poioicephala poioicephala</i> (Jerdon, 1844) as given by Deignan (1964: 407). Must now be dated 1841.
<i>Thimalia</i> [sic]	<i>platyura</i>	170	199			not listed	178– 1844: 170	See <i>Schoenicola platyura</i> (Jerdon, 1844) as given by Watson et al. (1986: 50). Must now be dated 1841.
<i>Phenicura</i>	<i>major</i>	170	199			not listed	96– 1844: 170	See <i>Brachypteryx major major</i> (Jerdon, 1844) as given by Ripley (1964: 15). Must now be dated 1841.

Table 1. Continued

Jerdon's generic name	Jerdon's specific name	Page in 1844	Page in 1841	Gray 1848 a	Gray 1848 b, c	Horsfield & Moore (1854) Page in above, plus data there cited	Baker (1930) Page in above, plus data there cited	Remarks ND=no date given
<i>Phaenicura</i>	<i>supersiliaris</i> [sic]	170	199			310– 1844: 170	97– 1844: 170	Spelling in the book corrected to <i>superciliaris</i> . Note the word 'corrected' (although <i>superciliaris</i> must be treated as the original spelling). It is believed that the type had already been set up for the Supplement and that it was not corrected. <i>Phoenicura superciliaris</i> Jerdon, 1841 is considered a junior synonym of <i>Eritrhacus brunneus brunneus</i> (Hodgson, 1837).
<i>Cinnyris</i>	<i>longirostris</i>	172	200			not listed	not listed	Now <i>Arachnothera longirostris</i> (Latham, 1790). Jerdon made no mention of Latham's earlier use of the name <i>Certhia longirostra</i> , and may well have thought he was introducing a new name. Blyth (1852: 222) mistakenly associated Jerdon's name with <i>Arachnothera affinis</i> (Horsfield, 1822) of south-east Asia.
<i>Hirundo</i>	<i>dominicola</i>	173	201			384– 1844: 173	257– 1844: 173	See <i>Hirundo tahitica dominicola</i> Jerdon, 1844 as given by Peters (1960: 108). Must now be dated 1841. May be a separate Indian endemic species see Dickinson & Dekker (2001: 133).
<i>Hirundo</i>	<i>inornata</i>	173	201		201	95– 201, 173	255– 1844: 173	As regards Horsfield & Moore (1854: 95) the context of p. 201 is <i>Madras Journ.</i> L.S. XII, and of p. 173 vol. XIII. The former is an error or is drawn from the book. <i>Hirundo inornata</i> Jerdon, 1841 is considered a junior synonym of <i>Pryonoprogne rupestris rupestris</i> (Scopoli, 1769).

Case 3291

DROMIIDAE Bonelli, 1810 (Insecta, Coleoptera, Caraboidea): proposed emendment of spelling to DROMIUSIDAE to remove homonymy with DROMIIDAE De Haan, 1833 (Crustacea, Decapoda, Brachyura, Dromiacea)

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Abstract. The purpose of this application, under Articles 29 and 55 of the Code, is to remove the homonymy between the beetle family name DROMIIDAE Bonelli, 1810 (type genus *Dromius* Bonelli, 1810) and the decapod family name DROMIIDAE De Haan, 1833 (type genus *Dromia* Weber, 1795). It is proposed that the entire generic name of *Dromius* should be adopted as the stem, so that the correct spelling of the beetle family name will be DROMIUSIDAE Bonelli, 1810.

Keywords. Nomenclature; taxonomy; Insecta; Coleoptera; Crustacea; Brachyura; Caraboidea; Podotremata; HARPALIDAE; LEBIINAE; DROMIINA; DROMIACEA; DROMIIDAE; DROMIUSIDAE; *Dromius*; *Dromia*.

1. The family-group taxon DROMIINA Bonelli, 1810 (Insecta, Coleoptera, Caraboidea, HARPALIDAE, LEBIINAE) was proposed by Bonelli in 1810 in an annexed and unnumbered sheet which, according to some authors (particularly Andrewes, 1919), did not satisfy the criteria for publication prescribed in the Code. Bonelli published in 1810 a small opusculum of 52 pages: '*Observations entomologiques*', to which he added a synoptic table ('*Tabula synoptica*'). Numerous family-group taxa (including 'Dromiei') were established in this table, and the question was whether this *Tabula* complied with the criteria for publication in the Code. Was the table always included in the issues of '*Observations entomologiques*' that were sold? In other words, was the table actually published?

From the nineteenth to the beginning of the twentieth century, some authors ignored Bonelli's work and either created a new family-group taxon based on the

genus *Dromius* (e.g. Hope, 1838), or attributed to another author than Bonelli such a taxon (e.g. Csiki, 1932). On the other hand, Bonelli's supra-generic classification was known and utilized by most nineteenth century authors.

Andrewes (1919) regarded Bonelli's supra-generic taxa as unavailable, since they had not been properly published, but were known only from Bonelli's reprints that were subsequently distributed. Jeannel, in his introduction to his '*Faune de France*' (1941–1942), was strongly opposed to this view and supported the idea that the '*Tabula synoptica*' had been properly published and diffused. As a result, he kept Bonelli's supra-generic taxa, such as '*Dromiitae*'.

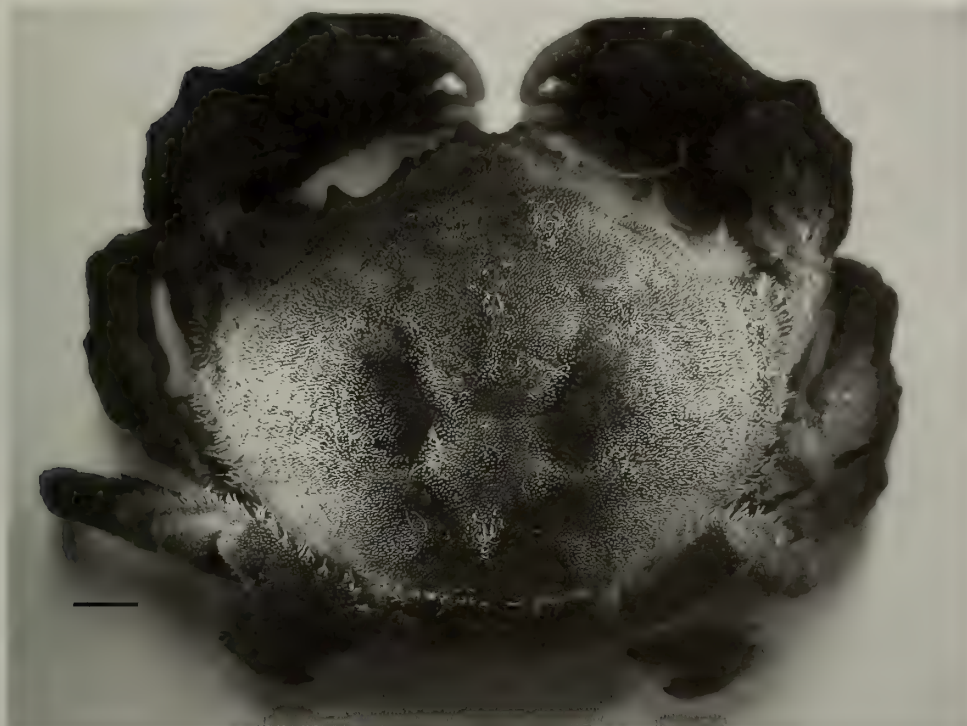
Gaskin & Lewis (1956) published a facsimile of Bonelli's synoptic table and concluded that it had been properly published in 1810. Basilewsky (1969), who seemed not to have known Gaskin & Lewis's work, discussed the problem, and similarly concluded that the table satisfied the Code's criteria for valid publication. This is an important problem since the main family-group taxa used for carabid coleopterans were established in Bonelli's work.

The case was brought to the Commission by Mroczkowski (1977) who proposed that Bonelli's *Tabula synoptica* be placed on the Official List of Works Approved as Available for Zoological Nomenclature. Mroczkowski, who did not cite the works of Jeannel and Basilewsky, considered that Bonelli's supra-generic taxa were not published according to the Code and, as a result, he requested the Commission to use its plenary power to rule that they had been published (he mistakenly gave 1811 as the synoptic table's publication date).

In response to the request for validation, Madge (1978) supported the view that the '*Tabula synoptica*' was published according to the Code in 1810. He concluded that validation by the Commission was not necessary, but that the taxa in question should be included in the Official List. In the same year, Holthuis (1978) supported Madge's argument, while Mroczkowski (1978) reiterated his conclusion on the non-publication of Bonelli's '*Tabula synoptica*'. The Commission approved as available Bonelli's (1810) work, placing it on the Official List (Opinion 1226, September 1982). '*Dromiei*' Bonelli, 1810 is therefore an available family-group taxon.

Hope (1838, p. 63) designated *Carabus quadrimaculatus* Linnaeus, 1758 (p. 416) as the type species of *Dromius* Bonelli, 1810.

2. The crustacean genus *Dromia* was introduced into the literature in the *Nomenclator entomologicus* (Weber, 1795). Weber was the first author who subdivided the large genus *Cancer* Linnaeus, 1758 by recognizing several crab genera. Although Weber's publication constitutes validly published available names, the same generic names were published a little later by Fabricius in his *Supplementum Entomologiae Systematicae* (1798). Both Weber and Fabricius used the same material in the Kiel Museum, with the manuscript notes of the naturalist Daldorff, who in the 1790s had collected many insects and crustaceans from India and Sumatra without publishing his own results (see Fransen et al., 1997). Consequently, the same latinized carcinological names were proposed in both Weber's and Fabricius's works, in the same order and with the same spelling. Weber's names are the oldest available names applied to these carcinological taxa. However, the *Nomenclator entomologicus* of Weber (1795), termed a 'miserable little book' by Holthuis (1959), was overlooked completely for more than 150 years in Europe, and Fabricius was considered the author who had published for the first time in 1798 all the generic taxa in question.



Dromia personata (Linnaeus, 1758), type species of the genus *Dromia* Weber, 1795, with the characteristic dromiid 'human face' depicted on the carapace, male, Marseille, submarine cave (MNHN-B 11198). Scale: 1 cm. (Photograph by L. Albenga, Muséum national d'Histoire naturelle, Paris).

This was the cause of much confusion and many nomenclatural problems. The majority of carcinologists refer to Fabricius as the author of the name *Dromia*, from Cuvier (1798) and H. Milne Edwards (1837) until the fundamental works of Bouvier (1896), Alcock (1900), Sakai (1936; 1976), and Barnard (1950).

Alerted by Sherborn (1902, p. 312), Rathbun (1904) drew attention to the booklet by Weber. This is the reason why, in the American publications (Rathbun, 1937), the author of *Dromia* is given as Weber (1795), and not Fabricius (1798). Following several nomenclatural acts proposed to the Commission by L.B. Holthuis, the question of authorship has been resolved in most cases. As a result, the nominal genus *Dromia* is credited to Weber. *Dromia* Weber, 1795 was placed on the Official List (Opinion 688, March 1964), with type species *Cancer personatus* Linnaeus, 1758 as proposed by Holthuis (1962, p. 55) and designated by the Commission (Opinion 688, 1964, BZN 21: 14). The 'Dromies' constitutes a particular group already in Latreille (1803) and H. Milne Edwards (1832). In the Crustacea volume of his monumental *Fauna Japonica*, published in several parts (livraisons) from 1833 until 1850 (see Holthuis, 1954), De Haan mentioned in his *Praemissa* (1833, p. 102) the family-group name DROMIACEA, under this Latin spelling. In 1839, 1849 and 1850, De Haan presented the components of his 'Decapodum Brachygnathorum Familia Tertia', and clearly explained that the DROMIACEA correspond to the 'Anomoures Apterures Dromiens and Homoliens' of H. Milne Edwards. Meanwhile, H. Milne

Edwards (1837) had created in his section of Anomoures, with a long diagnosis, the tribe DROMIENS, composed of the two genera *Dromia* and *Dynomene*, separating them from the two other tribes, the HOMOLIENS and the RANINIENS (that correspond to the current concept). De Haan included in the DROMIACEA four genera, *Dromia*, *Dynomene*, *Homola* and *Latreillia*, all characterized by having the posterior legs in the dorsal position. The DROMIACEA of De Haan correspond in a large part to the Notopodes of Latreille (1817, p. 13). Ortmann (1892) emended the names of Dana (1852): DROMIDEA to DROMIIDEA, and DROMIDAE to DROMIIDAE. The carcinological family DROMIIDAE, with *Dromia* Weber, 1795 as type genus, was placed on the Official List (Holthuis, 1962; BZN, Opinion 688, March 1964). In conclusion, all the family-group names for crustaceans based on *Dromia* must be attributed to De Haan, 1833.

3. Under Article 55.3.1 the replacement of the junior homonym would lead to the maintenance of DROMIINA Bonelli, 1810 (Insecta, Coleoptera) and to replace DROMIIDAE De Haan, 1833 (Crustacea, Brachyura) by emending its stem issued from 'DROMIACEA' De Haan, 1833 based on *Dromia* Weber, 1795 (stem *Dromi*-). Such an emendment would cause nomenclatural problems, because numerous brachyuran taxa have their name based on the stem *Dromi*-. The DROMIACEA, with representatives which are known from the Jurassic, constitutes either a subsection of the Podotremata Guinot, 1977 (see Guinot, 1978; Guinot & Tavares, 2003) or one of the two major sections (e.g. the group opposed to the assemblage Heterotremata-Thoracotremata Guinot, 1977) forming the Brachyura (see Martin & Davis, 2001). Within the DROMIACEA, the HOMOLODROMIIDAE is a family that is close to the DROMIIDAE, and the stem HOMOLODROMI- would not be emended. The family HOMOLODROMIIDAE, which consists of two genera, named *Homolodromia* and *Dicranodromia*, is probably the most primitive in the Brachyura, hence its importance for phylogenetic studies. To promote stability, and in attempting to be consistent, it seems preferable to emend neither DROMIIDAE nor HOMOLODROMIIDAE, for lack of being able to emend both. In addition, the family DROMIIDAE includes about thirty extant genera, the taxonomic names of which are based on the same stem. These names were formed either long ago (such as *Pseudodromia* Stimpson, 1858, *Dromidia* Stimpson, 1858) or more recently by McLay (1993) (such as *Fultodromia* or *Frodromia*) or by Guinot & Tavares (2003) (such as *Lamarckdromia*). No available replacement name exists for the family DROMIIDAE De Haan, 1833. In brief, any modification of the name DROMIIDAE would cause considerable confusion in both the classical and modern carcinological nomenclature as well as in both the taxonomic and non-taxonomic literature, even in the popular zoological handbooks where the dromiids or 'sponge crabs' form a well-known group.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that for the purposes of Article 29 of the Code the stem of the generic name *Dromius* Bonelli, 1810 is DROMIUS-;
- (2) to place on the Official List of Generic Names in Zoology the name *Dromius* Bonelli, 1810 (gender: masculine), type species by subsequent designation by Hope (1838) *Carabus quadrimaculatus* Linnaeus, 1758 (Coleoptera);
- (3) to place on the Official List of Specific Names in Zoology the name *quadrimaculatus* Linnaeus, 1758, as published in the binomen *Carabus*

quadrimaculatus, the specific name of the type species of *Dromius* Bonelli, 1810 (Coleoptera);

- (4) to place on the Official List of Family-Group Names in Zoology the name DROMIUSIDAE Bonelli, 1810, type genus *Dromius* Bonelli, 1810 (spelling emended by the ruling in (1) above) (Coleoptera);
- (5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name DROMIIDAE Bonelli, 1810 (an incorrect original spelling of DROMIUSIDAE, as ruled in (1) above) (Coleoptera).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3317***Scarabaeus arenarius* Olivier, 1789 (currently *Aphodius arenarius*) and *Scarabaeus fasciatus* Olivier, 1789 (currently *Aphodius fasciatus*) (Insecta, Coleoptera): proposed conservation of the specific names**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the specific names of the scarab beetles *Scarabaeus fasciatus* Olivier, 1789 (currently *Aphodius fasciatus*) and *S. arenarius* Olivier, 1789 (currently *Aphodius arenarius*). These names are junior primary homonyms of *S. fasciatus* Linnaeus, 1758 (currently *Trichius fasciatus*) and *S. arenarius* Fabricius, 1787 (currently *Aegialia arenaria*) respectively. Despite their homonymy the two specific names have been used since publication and are currently in use. *S. fasciatus* Linnaeus and *S. fasciatus* Olivier have never been considered congeneric, and *S. arenarius* Fabricius and *S. arenarius* Olivier have not been considered congeneric since 1807. *Trichius fasciatus* (Linnaeus) is a common and well-known pollinophagous Palaearctic species of the subfamily TRICHIINAE. *Aegialia arenaria* (Fabricius) (subfamily AEGIALIINAE or subfamily APHODIINAE, tribe AEGIALIINI) is a localized European sand-dwelling scarab beetle. *Aphodius* (*Planolinus*) *fasciatus* (Olivier) and *Aphodius* (*Plagiogonus*) *arenarius* (Olivier) are well-known European dung beetle species (subfamily APHODIINAE, tribe APHODIINI). It is also proposed that the name *Scarabaeus putridus* Geoffroy in Fourcroy, 1785 should be suppressed.

Keywords. Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; APHODIINAE; AEGIALIINAE; TRICHIINAE; *Aphodius arenarius*; *Aphodius fasciatus*; *Aegialia*; *Trichius*; dung beetles.

1. Linnaeus (1758, p. 352) described *Scarabaeus fasciatus*, a common European pollen feeding chafer, known as the bumblebee beetle. The species was transferred to *Trichius* Fabricius, 1775 (SCARABAEIDAE, TRICHIINAE) by Fabricius (1775, p. 40) where it has remained. Latreille (1810, p. 428) designated it as the type species of the genus *Trichius* Fabricius. A lectotype has not been designated, but four syntypes are preserved in the collection of the Linnean Society of London (Landin, 1956b, p. 12). *Scarabaeus fasciatus* Linnaeus, 1758 has been placed on the Official List of Specific Names in Zoology (Opinion 2079, September 2004).

2. Olivier (1789, p. 90) described *Scarabaeus fasciatus*, a widespread Palaearctic dung beetle. The species was transferred to *Aphodius* Illiger, 1798 (SCARABAEIDAE, APHODIINAE) by Fabricius (1801, p. 79) where it has remained. The lectotype was designated by Landin (1956a, p. 218f) and is deposited in The Natural History Museum, London, in the Banks collection. It is identical to *Aphodius putridus* (Herbst, 1789, nec Geoffroy in Fourcroy, 1785) (Landin, 1956a, p. 218). Silfverberg

(1977, p. 91) recognized the preoccupation of *A. fasciatus* (Olivier) and proposed *Aphodius tenellus* Say, 1823 as the oldest available name for that species. This has been followed by a number of authors as shown in para. 10 below. However, already in 1967, Brown stated that *Aphodius uliginosus* Hardy, 1847 is the oldest available (i.e. non-preoccupied name) for *Scarabaeus fasciatus* Olivier, because *Aphodius tenellus* Say, 1823 is a different species. In spite of the formal preoccupation of *Aphodius fasciatus*, this name is still in use, simultaneously with the two other names (see paras. 10 and 11).

3. In 1801 (p. 68), Fabricius used the name *Aphodius fasciatus* for another new species although he had adopted this binomen for Olivier's species already (see para. 2). This was an error since the type of this species is labelled '*Aphodius unifasciatus*' in Fabricius's hand (Landin, 1957). *A. fasciatus* Fabricius is a junior synonym of *A. coniugatus* (Panzer, 1795) (Illiger, 1803, p. 292; Landin, 1957). It has not been treated as a valid name since, and is a junior secondary homonym of *Aphodius fasciatus* (Olivier, 1789).

4. Fourcroy (1785, p. 12) described in six words *Scarabaeus putridus* (the name given by Geoffroy, see d'Aguilar & Raimbault, 1990), which was synonymized with *Scarabaeus arenarius* Fabricius, 1787 by Olivier (1789, p. 97). The name had been forgotten until Bedel (1911, p. 48) rediscovered and used it as the valid name for the species *Aphodius arenarius* sensu Olivier. The type is not known (Dellacasa, 1988, p. 186). Hence, its specific identity was considered by Landin (1956a, p. 224) 'impossible to interpret' and by Dellacasa (1983, p. 389) to be indecipherable ('indecifrabile'). Baraud (1992, p. 249) denies the synonymy of Fourcroy's *Scarabaeus putridus* with *Aphodius arenarius* (Olivier): '*putridus* auct., nec Fourcroy'.

5. Herbst (1789, p. 160f) described *Scarabaeus putridus*, a junior homonym of Fourcroy's (1785) *S. putridus*. The species was transferred to *Aphodius* Illiger, 1798 (SCARABAEIDAE, APHODIINAE) by Illiger (1798, p. 30, as a synonym of *A. foetidus* (F.)). It has remained in this genus. No type specimen is known (Dellacasa, 1988, p. 186).

6. Sturm (1805, p. 125) described *Aphodius putridus* (SCARABAEIDAE, APHODIINAE). It has been considered a synonym of *A. borealis* Gyllenhal, 1827 (Dellacasa, 1988, pp. 186, 393; Baraud, 1992, p. 251). However, no type specimen is known (Dellacasa, 1988, p. 186). Apart from Ádám (1994, 1996), *A. putridus* Sturm has not been treated as a valid name since and is a junior secondary homonym of *Scarabaeus putridus* Geoffroy in Fourcroy, 1785.

7. Fabricius (1787, p. 11) described *Scarabaeus arenarius*. The species was transferred to *Aphodius* Illiger, 1798 (SCARABAEIDAE, APHODIINAE) by Illiger (1798, p. 22), to *Psammodyus* Fallén, 1807 by Fallén (1807, p. 37), and finally to *Aegialia* Latreille, 1807 by Dejean (1821, p. 55) (SCARABAEIDAE, AEGIALIINAE) where it has remained and is the type species. It has been used constantly and frequently since its description (e.g. Stebnicka, 1977, p. 460 (older references therein); Paulian & Baraud, 1982, p. 89; Jessop, 1986, p. 17; Lundberg & Gustafsson, 1986, p. 65; Dellacasa, 1988, p. 359; Král, 1989, p. 19, 1993, p. 68; Lumaret, 1990, p. 338; McNamara, 1991, p. 147; Tiberghien, 1991, p. 225; Baraud, 1992, p. 105; Krell & Fery, 1992, p. 210; Silfverberg, 1992, p. 37; Duff, 1993, p. 127; Rössner, 1993, p. 6; Gürlich, Suikat & Ziegler, 1995, p. 71; Hansen, 1995, p. 125; Anderson et al., 1997, p. 27; Bordat, 1997, p. 37; Cantonnet, Casset & Toda, 1997, p. 107; Telnov et al., 1997, p. 55; Köhler & Klausnitzer, 1998, p. 129; Bunalski, 1999, p. 13). The

lectotype has been designated by Landin (1956a, p. 223) and is deposited in Fabricius's collection in Kiel.

8. Olivier (1789, p. 96 [Scarabé]) used *Scarabaeus arenarius* for a different species. He adopted this name for *Scarabaeus putridus* Geoffroy in Fourcroy, 1785, and cited *Scarabaeus arenarius* Fabricius with a question mark. The latter synonymy was definitely rejected by Illiger (1800, p. 201) in his annotated translation of Olivier's monograph. However, the name *S. arenarius* became established with Olivier's authorship. The species was transferred to *Aphodius* Illiger, 1798 (SCARABAEIDAE, APHODIINAE) by Fabricius (1801, p. 82) (as a synonym of *Aphodius arenarius* (F.)) where it has remained. The type is deposited in the Muséum national d'Histoire naturelle, Paris (Dellacasa, 1988, p. 90).

9. *Scarabaeus fasciatus* Olivier, 1789 is a junior primary homonym of *Scarabaeus fasciatus* Linnaeus, 1758. However, as shown in paras. 1 and 2 above, the two binomina *Scarabaeus fasciatus* had never been used simultaneously since *S. fasciatus* Linnaeus had been transferred to *Trichius* 14 years before *S. fasciatus* Olivier was described. Therefore they have never been considered congeneric and will never be because the species belong to two different subfamilies which are, according to some authors, even families. Despite their homonymy both names have been used constantly and frequently since their description (for the junior homonym *Aphodius fasciatus*, see para. 10, for the senior homonym *Trichius fasciatus*, see Paulian & Baraud, 1982, p. 397; Stebnicka, 1983, p. 132 (older references therein); Jessop, 1986, p. 30; Lundberg & Gustafsson, 1986, p. 68; Nikolaev, 1987, p. 207; Král, 1989, p. 25, 1993, p. 70; Dzhabazishvili, 1990, p. 57; Gangloff, 1991, p. 54; Baraud, 1992, p. 774; Silfverberg, 1992, p. 39; Duff, 1993, p. 132; Rössner, 1993, p. 13, 1996, p. 52; Ádám, 1994, p. 10; Carpaneto & Piattella, 1995, p. 15; Gürlich, Suikat & Ziegler, 1995, p. 73; Alexandrovitch, 1996, p. 30; Kahlen & Hellrigl, 1996, p. 476; Nikritskii et al., 1996, p. 59; Cantonnet, Casset & Toda, 1997, p. 109; Inglebert, 1997, p. 54; Telnov et al., 1997, p. 58; Brandstetter & Kapp, 1998, p. 68; Köhler & Klausnitzer, 1998, p. 131; Bunalski, 1999, p. 28; Rössner & Schulze, 1999, p. 59; Mitter, 2000, p. 107; Negrobov, 2000, p. 94; Rössner & Kaltz, 2000, p. 10; Bragina, 2002, p. 90).

10. Presently four different names are used for one species:

Aphodius fasciatus (Olivier, 1789) (Dellacasa, 1983, p. 386; Jessop, 1986, p. 8; Nikolaev, 1987, p. 123; Berlov, 1989, p. 400; Gangloff, 1991, p. 40; Krell & Fery, 1992, p. 218; Duff, 1993, p. 128; Rössner, 1993, p. 7, 1996, p. 50; Gürlich, Suikat & Ziegler, 1995, p. 72; Kahlen & Hellrigl, 1996, p. 475; Brandstetter & Kaupp, 1998, p. 67; Köhler & Klausnitzer, 1998, p. 130; Bunalski, 1999, p. 21; Mitter, 2000, p. 85; Rheinheimer, 2000, p. 104);

Aphodius putridus (Herbst, 1789) (Stebnicka, 1976, pp. 22, 119; Bast, 1985; Dellacasa, 1988, p. 393; Dzhabazishvili, 1990, p. 31; Franzen, 1992, p. 244; Koch, 1993, p. 230; Kim, 1995, p. 70, 2000, p. 100; Negrobov, 2000, p. 93);

Aphodius tenellus auct. nec Say, 1823 (Paulian & Baraud, 1982, p. 183; Stebnicka, 1983, p. 96; Lundberg & Gustafsson, 1986, p. 66; Král, 1989, p. 22; Silfverberg, 1992, p. 37; Miländer et al., 1993, p. 21; Nikritskii et al., 1996, p. 55; Roslin, 2000, pp. 323, 355);

Aphodius uliginosus Hardy, 1847 (Lumaret, 1990, p. 250; Baraud, 1992, p. 251; Král, 1993, p. 69; Ádám, 1994, p. 13, 1996, p. 304; Hansen, 1995, p. 126; Carpaneto & Piattella, 1995, p. 8; Alexandrovitch et al., 1996, p. 29; Anderson et al., 1997, p. 28;

Bordat, 1997, p. 33; Cantonnet, Casset & Toda, 1997, p. 105; Palestirini, Barbero & Rolando, 1998, p. 104; Náday & Merkl, 1999, p. 217; Tagliaferri, 1999, p. 4).

11. Presently the binomen *Aphodius putridus* is used for two or even three different species: Bast (1985), Dellacasa (1988, p. 393), Dzhambazishvili (1990, p. 31; 2000, p. 183), Franzen (1992, p. 244), Koch (1993, p. 230), Kim (1995, p. 70; 2000, p. 100), Köteles & Bakonyi (1996, p. 100), and Negrobov (2000, p. 93), e.g. use the name *Aphodius putridus* (Herbst, 1789) for *Aphodius fasciatus* (Olivier, 1789).

Paulian & Baraud (1982, p. 114), Jessop (1986, pp. 8, 21), Nikolaev (1987, p. 112), Lumaret (1990, p. 134), Nikčević (1991, p. 98), Silfverberg (1992, p. 37), Král (1993, p. 68), Miländer et al. (1993, p. 16), Carpeneto & Piattella (1995, p. 8), Hansen (1995, p. 126), Alexandrovitch (1996, p. 29), Bordat (1997, p. 33), Cantonnet et al. (1997, p. 103), Telnov et al. (1997, p. 57), Martynov (1998, p. 44), and Bragina (2002, p. 90), e.g. use the name *Aphodius putridus* (Geoffroy in Fourcroy, 1785) for *Aphodius arenarius* (Olivier, 1789).

Ádám (1994, p. 13; 1996, p. 304) used *Planolinus putridus* (Sturm, 1805) for *Aphodius borealis* Gyllenhal, 1827 (he promoted the subgenera of *Aphodius* to generic level).

However, *Aphodius fasciatus* (Olivier) is still in use (see para. 10), as is *Aphodius arenarius* (Olivier) (Rey, 1986, p. 119; Bouyon, 1991, p. 172; Gangloff, 1991, p. 35; Baraud, 1992, p. 249; Krell & Fery, 1992, p. 302; Rössner, 1993, p. 7, 1996, p. 49; Ziegler, Suikat & Gürlich, 1994, p. 5; Gürlich, Suikat & Ziegler, 1995, p. 71; Köteles & Bakonyi, 1996, p. 100; Köhler & Klausnitzer, 1998, p. 129; Náday & Merkl, 1999, p. 218, 2000, p. 75; Dzhambazishvili, 2000, p. 181, Negrobov, 2000, p. 91; Rheinheimer, 2000, p. 103; Rössner & Kalz, 2000, p. 8; Verdú & Galante, 2000, p. 397; Bunalski, 2001, p. 30; Schmidt, 2002 p. 76; Weichselbaumer, 2003, p. 84) despite their preoccupation. The only way to name these two species unequivocally is to avoid the equivocal binomen *Aphodius putridus* and to use the well-known and unequivocal synonyms *Aphodius fasciatus* (Olivier) and *Aphodius arenarius* (Olivier) instead. As in another similar case (Case 2878, BZN 51: 121–127; Opinion 1890, BZN 55: 54–57) the formally correct acts of replacing long forgotten homonyms have resulted in nomenclatural inconsistency and confusion rather than in any kind of stability.

12. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

(a) to suppress the name *putridus* Geoffroy in Fourcroy, 1785, as published in the binomen *Scarabaeus putridus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(b) to rule that the following specific names are not invalid:

(i) *fasciatus* Olivier, 1789, as published in the binomen *Scarabaeus fasciatus*, by reason of being a junior primary homonym of *Scarabaeus fasciatus* Linnaeus, 1758;

(ii) *arenarius* Olivier, 1789, as published in the binomen *Scarabaeus arenarius*, by reason of being a junior primary homonym of *Scarabaeus arenarius* Fabricius, 1778;

(2) to place on the Official List of Specific Names in Zoology the following names:

(a) *fasciatus* Olivier, 1789, as published in the binomen *Scarabaeus fasciatus* (not invalid by reason of being a junior primary homonym of *Scarabaeus fasciatus* Linnaeus, 1758 as ruled in (1)(b)(i) above);

- (b) *arenarius* Fabricius, 1787, as published in the binomen *Scarabaeus arenarius*;
- (c) *arenarius* Olivier, 1789, as published in the binomen *Scarabaeus arenarius* (not invalid by reason of being a junior primary homonym of *Scarabaeus arenarius* Fabricius, 1787 as ruled in (1)(b)(ii) above);
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *putridus* Geoffroy in Fourcroy, 1785, as published in the binomen *Scarabaeus putridus* and as suppressed in (1)(a) above;
 - (b) *putridus* Herbst, 1789, as published in the binomen *Scarabaeus putridus* (a junior primary homonym of *S. putridus* Geoffroy in Fourcroy, 1785);
 - (c) *putridus* Sturm, 1805, as published in the binomen *Aphodius putridus* (a junior primary homonym of *S. putridus* Geoffroy in Fourcroy, 1785);
 - (d) *fasciatus* Fabricius, 1801, as published in the binomen *Aphodius fasciatus* (a junior primary homonym of *Aphodius fasciatus* Olivier, 1789).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3259

***Eristalis* Latreille, 1804 (Insecta, Diptera): proposed confirmation that the gender is feminine; *Musca nemorum* Linnaeus, 1758, *M. arbustorum* Linnaeus, 1758 and *M. horticola* De Geer, 1776 (currently *Eristalis nemorum*, *E. arbustorum* and *E. horticola*): proposed conservation of usage of the specific names by designation of neotypes**

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Abstract. The purpose of this application, in accordance with Articles 79.5 and 75.6 of the Code, is twofold. First, it seeks to confirm that the gender of the generic name *Eristalis* Latreille, 1804 is feminine. Secondly, it seeks to maintain long-established usage of two specific names in this genus: *Eristalis nemorum* (Linnaeus, 1758) and *Eristalis horticola* (De Geer, 1776) by designating neotypes for *E. arbustorum* (Linnaeus, 1758), *E. nemorum* and *E. horticola*.

Keywords. Nomenclature; taxonomy; Diptera; SYRPHIDAE; *Eristalis*; *Eristalis arbustorum*; *Eristalis interrupta*; *Eristalis nemorum*; *Eristalis horticola*; *Eristalis lineata*; bee-mimic hoverflies.

The gender of the generic name *Eristalis* Latreille, 1804

1. The name *Eristalis* was proposed by Latreille in 1804 (p. 194) for a group of hoverflies (Diptera, SYRPHIDAE). It was unclear what gender he attributed to the name because the seven included species were all listed in combination with *Syrphus* (and attributed to Fabricius, who had included them in that genus) and consequently had masculine terminations in the three cases (*intricarius*, *floreus* and *pendulus*) where the specific name was affected by gender. Only two of the originally included species (*tenax*, *intricarius*) are currently placed in *Eristalis*.

2. The type species of *Eristalis* is *Musca tenax* Linnaeus, 1758 (p. 591) by subsequent designation by Curtis (1832, pl. 432, text). In 1993 the Commission placed *Eristalis* on the Official List (Opinion 1747) and gave its gender as masculine, but gave no reason for this choice of gender. This followed usage in some earlier literature including Verrall (1901) and all subsequent British literature, and has been accepted in a checklist of British Diptera (Chandler, 1998) which was followed by Stubbs & Falk (2002). The Nearctic list (Wirth et al., 1965) also treated it as masculine. However, other regional lists (Knutson et al., 1975, Oriental; Smith & Vockeroth,

1980, Afrotropical; Peck, 1988, Palaearctic; Thompson & Vockeroth, 1989, Australasian and Oceanian) and a recent work on Neotropical species (Thompson, 1997) treat it as feminine. The European literature is inconsistent. Some national lists (e.g. Soszynski, 1991, Poland; Verlinden, 1991, Belgium; Holinka & Mazánek, 1997, Czech & Slovak Republics; Marcos-García et al., 2002, Spain, Portugal & Andorra) and faunistic works (e.g. Kormann, 1988; Torp, 1984) treat it as masculine. Other national lists (e.g. Daccordi, 1995, Italy; Maibach et al., 1998, Switzerland; Ssymank et al., 1999, Germany; Tóth, 2001, Hungary; van Steenis & Barendregt, 2002, Netherlands) and faunistic works (e.g. van der Goot, 1981; Torp, 1994; Nielsen, 1999) continue to consider the gender of *Eristalis* to be feminine.

3. In particular, Hippha, Nielsen & van Steenis (2001, p. 293) state that the gender of *Eristalis* is feminine and cite Article 31.1.1 by way of justification. However, they must have intended citing Article 30.1.1, which states that 'a genus-group word that is or ends in a Latin word takes the gender given for that word in standard Latin dictionaries'. Brown (1954, p.339) describes 'eristalis' as a feminine Latin word that refers to an unknown precious stone.

4. Given the widespread acceptance of feminine gender for *Eristalis* and the fact that this choice of gender is supported by Article 30.1.1, we propose that the Commission amends Opinion 1747, in accordance with Article 79.5, by ruling that *Eristalis* is feminine and that the Official List of Generic Names in Zoology is amended to this effect.

Proposed conservation of the names *Eristalis nemorum*, *E. arbustorum* and *E. horticola* by designation of neotypes

5. This application concerns the names of three well-known and common species of bee mimic hoverflies (Diptera, SYRPHIDAE) in the genus *Eristalis* Latreille, 1804, of which the type species is the drone fly *Musca tenax* Linnaeus, 1758 (p. 591). Two of these species, *E. arbustorum* (Linnaeus, 1758 (p. 591)) and *E. nemorum* (Linnaeus, 1758 (p. 591)) have a Holarctic distribution while the third, *E. horticola* (De Geer, 1776 (p. 140)), is a widespread Palaearctic species and also extends into the Oriental Region, as does *E. arbustorum*. These specific names are unaffected by the gender of the generic name discussed above as the first two are genitive plurals and the third is a noun in apposition.

6. Thompson et al. (1982) revised the SYRPHIDAE in Linnaeus's collection and designated lectotypes of some species including *E. tenax* and *E. nemorum*. Under *E. arbustorum* (p. 151) they found a female of *E. tenax*, which they concluded to have been substituted and not a syntype, as Linnaeus's description could apply only to a male of either *E. tenax* or *E. arbustorum*. Consequently they did not designate a lectotype of *E. arbustorum* and concluded that existing usage should prevail. Under *E. nemorum* (p. 158) they found a female of *E. arbustorum* and designated it as lectotype, concluding that it fitted Linnaeus's description, which some early authors had concluded to refer to the female of *E. arbustorum*. Resulting from this synonymy they stated that the valid name for *nemorum* of authors was *E. interrupta* (Poda, 1761, p. 118) but gave no justification for considering this name to apply to *E. nemorum* of authors. In view of the uncertainty about whether specimens in Linnaeus's collection are syntypes (see also Case 3090, BZN June 2000, and the resulting Opinion 1982, BZN September 2001) it is considered that the replacement of the name *E. nemorum*,

which had been in use for this species for two centuries, by a name that had not previously been used as a valid name in SYRPHIDAE, was unjustified.

7. Most subsequent authors have followed Thompson et al. (1982) in accepting the synonymy of *E. nemorum* with *E. arbustorum* and have used the name *E. interrupta* or *E. interruptus*, according to the gender that they have applied to *Eristalis*, for *E. nemorum* of authors. Thompson & Pont (1994) listed *Conops interruptus* Poda, 1761, stating it to be a valid name in *Eristalis* but indicated that there was no surviving type material. The identification of *E. interruptus* as *E. nemorum* of authors is not, however, unequivocal since in the Palaearctic Catalogue (Peck, 1988) it is listed in the synonymy of *E. tenax* while five other names (of which *Musca lineolae* Harris, 1776 is the most senior) are listed in synonymy with *nemorum*. Although Peck (1988) appeared after Thompson et al. (1982) the cut-off date for inclusion in the catalogue was 1982 and Thompson et al. (1982) was not cited, hence the traditional usage of *E. nemorum* in this catalogue. This doubt about the identity of *Conops interruptus* is considered to support the restoration of the name *E. nemorum*.

8. The name *Musca horticola* was proposed by De Geer (1776, p. 140) for a species of bee mimic hoverfly. At the same time (1776, p. 140), he erroneously listed *Musca nemorum* Linnaeus, 1758 (p. 591) as a synonym of *M. horticola*. As indicated above *M. nemorum* was synonymised with *M. arbustorum* Linnaeus, 1758 (p. 591) by Thompson et al. (1982). As a result, Thompson & Pont (1994) treated *M. horticola*, *M. nemorum* and *M. arbustorum* as synonyms. Thompson & Pont (1994) accepted the name *Musca lineata* Harris, 1776 (p. 42) as the valid name for *M. horticola* of authors but this name was not subsequently used for this species until the revision by Hippa et al. (2001). No type material exists for any species described by Harris but *E. lineata* has long been regarded as a synonym of *E. horticola* on the basis of the colour plate provided by Harris. According to Evenhuis (1997), the precise publication date of the 1776 works of both De Geer and Harris is not known so it cannot be confirmed which name has priority. It is, however, considered that the description of *E. horticola* by De Geer applied to the species that has been known by this name for more than two centuries and *E. lineata* had not been used as a valid name during this time. As stated in Case 3090 (p. 90), De Geer (1776) cited Linnaean names following his own diagnoses of fifteen Diptera species described as new by him and in several of these cases the synonymy is clearly wrong. As in these cases it is considered that De Geer intended his name *horticola* for a newly described species and not as a replacement name for Linnaeus's species *nemorum*. *Musca horticola* De Geer, 1776 was a newly described species different from *nemorum* and there is no justification for regarding it as a synonym of *Musca nemorum* Linnaeus, 1758.

9. In order to maintain the long prevailing usage (for a period of more than 200 years) of the names *E. nemorum* and *E. horticola* and at the same time confirm the usage of *E. arbustorum*, we propose that the Commission set aside all existing type material for these three nominal taxa and designate neotypes in accordance with Article 75.6 of the Code. The type locality of *Musca arbustorum* and *Musca nemorum* was stated by Linnaeus to be Europe but Thompson et al. (1982) restricted this to Sweden. The type locality of *Musca horticola* was not stated but is again assumed to be Sweden. A Swedish male specimen of each of the three species in the collection of The Natural History Museum, London, has been selected as the proposed neotype and each has been labelled 'NEOTYPE designated by P.J. Chandler 2004', subject to the Commission's ruling on this application.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power:
 - (a) to amend the status of the generic name *Eristalis* Latreille, 1804 in accordance with Article 79.5 of the Code and rule that the gender of *Eristalis* is feminine;
 - (b) to set aside all previous type fixations for the nominal species:
 - (i) *Musca arbustorum* Linnaeus, 1758, and to designate the male specimen labelled Lpm, Sorsele, 10/8/58, leg. S. Gaunitz, R. Dahl Coll., BM 1997–740 as the neotype;
 - (ii) *Musca nemorum* Linnaeus, 1758, and to designate the male specimen labelled Sweden, Vstm, Nora district, Klacka Lerberg, 22.vi.1986, in horse paddock, leg. A.C. Pont, 'Er. interrupta (Poda) T.R. Nielsen det.' as the neotype;
 - (iii) *Musca horticola* De Geer, 1776, and to designate the male specimen labelled Sweden, Sk, Höör Lillöbukten, 2.viii.1980, leg. A.C. Pont, 'Eristalis horticola Deg. det. Tore Nielsen' as the neotype;
- (2) to amend the entry on the Official List of Generic Names in Zoology for the name *Eristalis* Latreille, 1804 to indicate that its gender is feminine;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *arbustorum* Linnaeus, 1758, as published in the binomen *Musca arbustorum* and as defined by the neotype designated in (1)(b)(i) above;
 - (b) *nemorum* Linnaeus, 1758, as published in the binomen *Musca nemorum* and as defined by the neotype designated in (1)(b)(ii) above;
 - (c) *horticola* De Geer, 1776, as published in the binomen *Musca horticola* and as defined by the neotype designated in (1)(b)(iii) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3290***Platystrophia* King, 1850 (Brachiopoda, Orthida): proposed conservation of usage by designation of *Porambonites costata* Pander, 1830 (currently *Platystrophia costata*) as the type species of *Platystrophia***

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Abstract. The purpose of this application, in relation to Article 75.5 of the Code, is to conserve the prevailing usage of *Platystrophia* King, 1850 for a genus of fossil brachiopod of Ordovician–Silurian age. The description of the type species *Terebratulites biforatus* Schlotheim, 1820 is not diagnostic and no original figures were published. Confusion and uncertainty surround the specific name of the type species because of the conflicting interpretation of the genus and absence of the holotype. It is therefore proposed that the Commission designate *Porambonites costata* Pander, 1830 as the type species of *Platystrophia*.

Keywords. Nomenclature; taxonomy; Brachiopoda; Orthida; *Platystrophia*; *Platystrophia costata*; fossil brachiopods; Ordovician; Silurian.

1. The specific name of *Terebratulites biforatus* was established by Schlotheim (1820, p. 265) for a single specimen of fossil brachiopod, the type area and age of which were indicated as ‘aus dem südlichen Frankreich. Vielleicht gleichfalls aus Kreidelagern der Champagne’. The description of this species is very brief and not supported by figures. The name *T. biforatus* can therefore be applied to any *Spirifer*-like taxon from the Palaeozoic or Mesozoic of France. Although Schlotheim’s original specimen was redescribed twice (Buch, 1837, p. 44; Dietrich, 1922, p. 124), neither study contributed any new information of phylogenetic or taxonomic value. The current confusion surrounding the identity of *Terebratulites biforatus* was introduced by Buch (1837, p. 44), who incorrectly suggested that Schlotheim’s specimen more probably came from the North (i.e. the Baltic region), and not from France: ‘welches wahrscheinlich ebenfalls ein nordisches Stück ist, und nicht aus Frankreich’.

2. The existence of the holotype of *Terebratulites biforatus* had been cited several times (e.g. Buch, 1837, p. 44; Dietrich, 1922, p. 124). The brachiopod collection in the Museum of Natural History of the Humboldt University (Berlin, Germany) includes some material from Schlotheim’s personal collection described in his monograph.

However, the specimen has not been mentioned since 1922. An extensive search for the holotype of *T. biforatus* in the museum in 2002 proved unsuccessful.

3. In 1850 King (p. 106) established the genus *Platystrophia* and designated *Terebratulites biforatus* Schlotheim (sensu Davidson) as the type species. However, King mentioned that the specimens of *T. biforatus* figured and described by Davidson were not spirifers, but representative of new genera. Only one publication by Davidson prior to 1850 is known (Davidson, 1848) where the name *T. biforatus* Schlotheim was applied to the Early Silurian material (disarticulated dorsal and ventral valves) from the United Kingdom. However, based on internal morphology, Davidson placed *T. biforatus* in the genus *Orthis*. He (Davidson, 1871, p. 269) noted that King had cited specimens of *O. biforata* from Davidson's earlier paper (1848, p. 15, pl. 3, fig. 25) as the type species of the genus *Platystrophia*: 'As to the genus, I think I was able to satisfactorily demonstrate in 1848 that its internal characters were those of *Orthis*, and I am glad to find that palaeontologists very generally have followed my identification. Prof. King, in 1849 [=1850], proposed to consider it the type of a new genus, *Platystrophia*'.

4. Following King (1850) nearly all authors who discussed the genus *Platystrophia* ignored the French locality of Schlotheim's specimen of *Terebratulites biforatus* or King's use of the name sensu Davidson, 1848 (see para. 3 above). Most authors used the concept of the species proposed by Buch (1837, p. 44) because the age and locality of *Terebratulites biforatus* Schlotheim was commonly indicated as 'from the Ordovician of the Baltic area (exact locality and horizon uncertain)' (Cocks, 1978, p. 55) or 'Ordovician, from the erratic boulder of the North Germany' (Alichova, 1960, p. 186). McEwan (1919, p. 388) proposed replacing Schlotheim's type species *T. biforatus* with *Platystrophia laticosta* (Meek, 1873) from the Upper Ordovician of North America (invalid under Article 30 of the Rules then in force (1905); Article 67.2 of the 4th (current) edition). This proposed replacement was discussed by a number of authors (see Bather, 1920, p. 89; Dietrich, 1922, p. 123). Alichova (1969, p. 17) proposed that the specimen described by Öpik (1930, p. 103, pl. 5, fig. 48) as *Platystrophia biforata* (Schlotheim) from the lower Caradoc of north Estonia should be selected as the lectotype for *Terebratulites biforatus* (invalid under Article 69(a)(i) of the Code then in force (1964); Article 72.2 of the 4th (current) edition). Moreover, it is clear that the Estonian material is not the same species as the specimens from the Wenlock (see para. 5 below).

5. The new genus *Platystrophia* King, 1850 was based on the nominal species *Terebratulites biforatus* Schlotheim as misidentified by Davidson (1848) (as *Orthis biforata*) (see para. 3 above). Under Article 11.10 of the Code, King's action is interpreted as a 'deliberate employment of a misidentification' and renders the specific name a new nominal species 'available with its own author and date as though it were newly proposed in combination with the new genus-group name'. Therefore, the type species of *Platystrophia* King, 1850 is *Platystrophia biforata* King, 1850 (p. 106) from the 'Wenlock limestone of Walsall' in the United Kingdom (Davidson, 1848, p. 323) now the Much Wenlock Limestone Formation of the early Silurian (Bassett et al., 1975) (Articles 50.1.2, 67.13.1). The lectotype of this species should be one of the two specimens figured and described by Davidson (1848, p. 15, pl. 3, fig. 25) (Article 72.4.2). However, the original specimens of *Orthis biforata* described in Davidson's monograph (= *Platystrophia biforata* King, 1850) were lost

and there is no other original material from the type horizon and type locality housed in the Natural History Museum, London (L.R.M. Cocks & L.E. Popov pers. comm.). Bassett (1972, p. 32, pl. 5, figs. 3–5) described specimens from the Wenlock of Walsall as *Platystrophia* sp. A and included specimens of *Orthis biforata* described by Davidson (1848, 1871) in his synonymy list. There were no satisfactory data on the morphological features of *Orthis biforata* in either the description or on the figures in Davidson (1848, p. 15) which allow unequivocal attribution of any specimens from the Wenlock Limestone of Walsall to *Platystrophia biforata* King, 1850. Thus, there are no strong grounds to confirm or reject the assumption that Bassett (1972, p. 32) described and illustrated specimens conspecific with *Platystrophia biforata* King even if they came from the type locality and horizon. Davidson (1871, p. 268) figured some additional specimens under the name *Orthis biforata* from the Caradoc and Wenlock of the United Kingdom and Ireland (but not illustrated by Davidson, 1848, p. 15, pl. 3, fig. 25) under the name *O. biforata*; these are also missing.

6. Baltic representatives of the genus *Platystrophia* have recently been the subject of a series of papers by Zuykov (1995, 1999 & 2001) but the problem of designating a viable type species for the genus *Platystrophia* is unresolved. These studies emphasized the importance of the correct diagnosis of the type species of the genus because of significant variations in the morphology of the cardinalia in the numerous species attributed to this genus. In the original diagnosis of *Platystrophia*, King (1850) recorded the presence of ‘large punctures’ (which were later interpreted as granules, but in reality represent the bases of hollow spines) on the external shell surface. Therefore, a presence of this character, which is unique among brachiopods of the order Orthida, must be regarded as an important diagnostic feature of the genus *Platystrophia*. There are over 150 Ordovician and Silurian species currently assigned to *Platystrophia* from many parts of the world (Zuykov, 1999, p. 198; 2001, p. 332). In general, King’s (1850) diagnosis provided a clear morphological concept which can be applied to most of the species presently referred to the genus. It is desirable to maintain stability in the nomenclature of this important and distinctive taxon and the Commission is therefore asked to ratify prevailing usage by designating a new type species for the genus *Platystrophia* (see para. 8 below).

7. King (1850, p. 106) included four species in the genus *Platystrophia* apart from the originally designated type species: *Spirifer tscheffkini* Verneuil, 1845, *Porambonites dentatus* Pander, 1830, *Porambonites costata* Pander, 1830 and *Spirifer terebratuliformis* McCoy, 1846. The first species, *Spirifer tscheffkini* Verneuil, 1845, is now assigned to the unrelated genus *Noetlingia* Hall & Clarke, 1893 (p. 229) in the order Pentamerida, whereas the three others form a distinct morphological group (*Platystrophia*). Because of the uncertain identity of the type species *P. biforata*, due to the ambiguous description of the species and absence of type material we consider *P. biforata* King to be a nomen dubium and therefore request that the type species designation be set aside and that *Porambonites costata* Pander, 1830, which is clearly described, should be designated as the type species of *Platystrophia*. *P. costata* (Pander, 1830) was revised recently by Zuykov (1999, p. 200).

8. Pander (1830, p. 96) established the distinctive brachiopod species *Porambonites costata*. A holotype was not designated in the original publication, and the syntype material had been lost before the beginning of the 20th century (Jaanusson & Bassett, 1993, p. 23). However, two complete shells of *Platystrophia* from Pander’s 1845

collection (MMI no. 362) are preserved in the Museum of the Mining Institute (St. Petersburg, Russia). They were collected in the type area (Pulkova River, St. Petersburg district, according to the map of the localities given in the original publication), thus they can be considered as topotypes. These specimens were labelled by Pander as '*Spirifer biforatus* var. *chama*, *biplicata*' and are considered to be synonymous with *Porambonites costata* Pander (see discussion in Verneuil, 1845, pp. 139, 140). They fit the original description with respect to external shell morphology and radial ornament and strongly resemble the original illustrations of *Porambonites costata* Pander, 1830 (p. 96, pl. 11, fig. 3). Zuykov (1999, p. 200, pl. 1, figs. 1–5) designated one of the specimens from Pander's 1845 collection from the Pulkova River, St. Petersburg region (horizon not specified, probably from the Kunda Stage, Obukhovo Formation) as the neotype of *Platystrophia costata* (Pander).

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of the type species for *Platystrophia* King, 1850 and to designate *Porambonites costata* Pander, 1830 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Platystrophia* King, 1850 (gender: feminine), type species by designation in (1) above *Porambonites costata* Pander, 1830;
- (3) to place on the Official List of Specific Names in Zoology the name *costata* Pander, 1830 (gender: masculine), as published as the binomen *Porambonites costata* (specific name of the type species of *Platystrophia* King, 1850) and as defined by the neotype designated by Zuykov, 1999.

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Case 3235***Sclerocrinus* Jaekel, 1891 (Crinoidea, Cyrtocrinida): proposed precedence over *Gammarocrinites* Quenstedt, 1857**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Sclerocrinus* Jaekel, 1891 for a group of fossil (Upper Jurassic (Oxfordian)-Lower Cretaceous (Valanginian)) crinoids by giving it precedence over the name *Gammarocrinites* Quenstedt, 1857 whenever the two are considered to be synonyms. The two names have been used indiscriminately for the same taxon.

Keywords. Nomenclature; taxonomy; SCLEROCRINIDAE; *Sclerocrinus*; *Gammarocrinites*; *Gammarocrinites compressus*; *Sclerocrinus strambergensis*; fossil crinoids; Upper Jurassic-Lower Cretaceous; Europe.

1. In 1857 Quenstedt (p. 654) proposed the name *Gammarocrinites* for a group of small fossil crinoids and included the nominal species *Eugeniocrinites compressus* Goldfuss, 1829, *E. nutans* Goldfuss, 1829 and similar forms which are different from *E. caryophyllatus* Goldfuss, 1829. Although Quenstedt did not designate a type species for *Gammarocrinites*, de Loriol (1879, p. 209) was of the opinion that he had introduced *Gammarocrinites* for *Eugeniocrinus nutans* [sic]. In discussing the variability of *E. nutans*, de Loriol (1879, p. 209) considered *E. compressus* to be within the range of variation of *E. nutans* and thus conspecific with that species. Subsequently de Loriol (1882, p. 115) mentioned that Quenstedt had established the generic name *Gammarocrinites* for *Eugeniocrinus caryophyllatus*. Jaekel (1891, p. 626) considered *E. compressus* to be different from *E. nutans* on the basis of the granular surface. In his main and final work, Quenstedt (1873, p. 427) placed *E. compressus* in the genus *Eugeniocrinus* Agassiz, 1836 but *Gammarocrinites* was not mentioned. The extant and related species *Gymnocrinus richeri* Bourseau, Améziane-Cominardi & Roux, 1987 demonstrates that granularity is a variable character within a species of cyrtocrinid crinoids (Bourseau et al., 1991, p. 277).

2. In 1891 Jaekel (p. 621) established the genus *Sclerocrinus* mentioning *S. strambergensis* Jaekel, 1891 (p. 623) as a typical species and also (p. 602) established the genus *Cyrtocrinus*. He recognized the main differences from other cyrtocrinids (his 'holopocrinids') as a more spherical cup with a deep, broad aboral excavation, a shallow oral cavity and also flat articular brachial facets with only small muscular fields. Jaekel (1891, p. 622) mentioned the existence of many intermediates between the two genera. *Sclerocrinus* has the most massive crown of all cyrtocrinids. The oldest '*Sclerocrinus*' fossils with a granular surface, '*S. compressus*' from the Oxfordian (Late Jurassic), closely resemble granular specimens of *Cyrtocrinus nutans*

(see Hess & Spichiger, 2001). Rasmussen (1961, p. 217) treated *Sclerocrinus* as a valid genus and designated *S. strambergensis* as the type species.

3. Rasmussen (1978, p. T831), in the *Treatise on Invertebrate Paleontology*, treated *Sclerocrinus* as a junior synonym of *Gammarocrinites* (type species *Eugeniocrinites compressus* Goldfuss, 1829, p. 164). He thus followed Bather (1900, p. 197) who recorded *Sclerocrinus* as a junior synonym of *Gammarocrinites*. As explained in para. 2 above, *E. compressus* may be conspecific with *E. nutans* and separation at the generic level is not warranted. *Cyrtocrinus* is a well-defined and widely used name for an important group of crinoids, the Cyrtocrinida and it should therefore be preserved. The type species of *Sclerocrinus*, *S. strambergensis*, is clearly different from *E. nutans*.

4. In more recent literature both *Gammarocrinites* and *Sclerocrinus* have been used without considering the validity of these names. Gluchowski (1987), following the *Treatise* (Rasmussen, 1978), accepted *Gammarocrinites* Quenstedt, 1857 as a valid name for *E. compressus* as did Jäger (1980, p. 64) and Nicosia (1991, p. 396). However, Žitt (1974, p. 17; 1975, p. 115) and Pisera & Dzik (1979, p. 813) followed Arendt (1974, p. 101) in treating *Sclerocrinus* as a valid genus. In the interest of stability we propose that the name *Sclerocrinus* Jaekel, 1891 be given precedence over *Gammarocrinites* Quenstedt, 1857, whenever the two names are considered to be synonyms. Therefore, the case is referred to the Commission under Articles 23.9.3 and 81.2.3 of the Code.

5. The family name SCLEROCRINIDAE was established by Jaekel (1918, p. 75) and maintained in the *Treatise* (Rasmussen, 1978, p. T829) under Article 40. The nominal genera *Gammarocrinites* and *Cyrtocrinus* were included in this family in the *Treatise*.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *Sclerocrinus* Jaekel, 1891 precedence over the name *Gammarocrinites* Quenstedt, 1857, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Sclerocrinus* Jaekel, 1891 (gender: masculine), type species by subsequent designation by Rasmussen (1961) *S. strambergensis* Jaekel, 1891, with the endorsement that it is to be given precedence over the name *Gammarocrinites* Quenstedt, 1857 whenever the two names are considered to be synonyms;
 - (b) *Gammarocrinites* Quenstedt, 1857 (gender: masculine), type species by subsequent designation by Rasmussen (1978) *Eugeniocrinites compressus* Goldfuss, 1829, with the endorsement that it is not to be given priority over the name *Sclerocrinus* Jaekel, 1891 whenever the two names are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *strambergensis* Jaekel, 1891, as published in the binomen *Sclerocrinus strambergensis* (specific name of the type species of *Sclerocrinus* Jaekel, 1891);
 - (b) *compressus* Goldfuss, 1829, as published in the binomen *Eugeniocrinites compressus* (specific name of the type species of *Gammarocrinites* Quenstedt, 1857).

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Comment on the proposed conservation of usage of *Narella* Gray, 1870 (Coelenterata, Octocorallia) by designation of a neotype for its type species *Primnoa regularis* Duchassaing & Michelotti, 1860 (Case 3276; see BZN 61: 7–10)

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I worked on the octocoral family PRIMNOIDAE years ago, and I know the ‘*Narella*-problem’. I welcome the proposals by Cairns & Bayer and am pleased that they took the initiative to apply to the Commission for settling the problem by designating a neotype for the type species of the genus. After much instability in the past we may be glad that the name *Narella* is accepted and everybody working with octocorals knows what *Narella* is. It would be highly undesirable to upset the prevailing usage of this name, which has been used consistently for over half a century, as it would cause a reversion to old, largely unknown names. I fear as a consequence, mainly in field guides and textbooks, that some authors would follow and others would not and new confusions would begin. I approve of the aim of the application and ask the Commission to support the proposals.

Comment on the proposed conservation of usage of *Thereva* Latreille, 1797 (Insecta, Diptera) by designation of *Musca plebeja* Linnaeus, 1758 as the type species of *Thereva*

(Case 3251; see BZN 60: 198–202)

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1. I wish to record my opposition to the proposals by Holston et al. for action under the plenary power relating to the names *Thereva* Latreille, 1797 and *Thereva* Fabricius, 1798. The *Thereva* problem treated by Holston et al. is only the tip of the iceberg. Fabricius, famous for his pioneering elaboration of a ‘Systema’ for the insects in a series of works from 1775 to his death in 1808, ‘borrowed’ numerous generic names established by contemporary colleagues and deliberately used them in an entirely different meaning from what was originally intended. The Commission Secretariat holds a complete overview of such incidences in Fabricius’s work covering only the Diptera.

2. Holston et al. (see para. 11 of the application) suggested that Fabricius’s usage of *Thereva* (for a group of tachinid flies) should be treated as a misapplied use of Latreille’s name, which was clearly intended for stiletto flies. They interpreted *Thereva* Fabricius as an unavailable name under Article 52.2 of the Code. A consequence of this is that Herting’s (1984) designation of *Conops subcoleoptratus* Linnaeus, 1797 as type species of *Thereva* Fabricius, 1798 threatens the long

established usage of the name *Thereva* Latreille. Because of this unfortunate side effect of their interpretation, Holston et al. have asked the Commission to set aside all previous fixations of type species for *Thereva* Latreille, 1797 and to reject the name *Thereva* Fabricius, 1798 as a junior homonym. As an invalid name this request seems redundant. Perhaps this is an indication that the authors are not fully convinced about the status of *Thereva* Fabricius as an invalid name.

3. In an assessment of Fabricius's usage of generic names it should be asked whether they satisfy the criteria of availability (Articles 10 to 20 of the Code). If they do not meet all necessary conditions, we must follow Holston et al. and disregard them as names without formal standing in nomenclature. If, on the contrary, they stand up to all necessary criteria of availability, there is no formal hindrance to treating them as proper nominal taxa with their own authorship and date. The Code does not reveal any provisions that prevent availability of such names as *Bibio* Fabricius, 1775 and *Thereva* Fabricius, 1798. However, this observation alone is far from conclusive evidence. In fact, the same goes for truly misidentified names (i.e. unintentional misidentification of existing names, a category of names that is conventionally not considered as available). Existing names unintentionally proposed for new taxa are, on the contrary, available with their own authorship and date. However, when recognized as junior homonyms such names are usually not used as valid (see Articles 10.6, 11.10 and 52).

4. In light of the above examples, how should we treat Fabrician names in this category of existing names intentionally proposed for new taxa? Strange and confusing as those actions may appear today, we should keep in mind that Fabricius worked at a time without any constraints, in terms of Code regulations, such as the Principles of Priority and Homonymy. Would it be in the spirit of the Code to set aside Fabricius's clear intentions by dismissing his alternative usages of names? I do not think so, particularly with reference to one of its underlying principles, which is to refrain from 'infringing upon taxonomic judgment, which must not be made subject to regulation or restraint' (Code, p. xix).

5. It is perfectly clear that Fabricius 'borrowed' such generic names as *Bibio*, *Hirtea*, and *Thereva* etc. from his colleagues and then openly and intentionally proposed new usages for them. Ignoring this fact by degrading Fabricius's alternative usages into informal serial use is on one hand a clear violation of his intentions; on the other it leaves the impression that Fabricius often did not keep track of the results of his colleagues. Dismissal of Fabricius's alternative generic usages may also, as an unfortunate side effect, tend to obscure significant aspects of the early post-Linnaean history of insect classification.

6. Finally, because of the Principle of Homonymy, the safest and simplest way to promote nomenclatural stability is clearly to identify Fabricius's alternative usages of generic names and to treat them as nominal taxa in their own right.

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Comment on the proposed precedence of NEMONYCHIDAE Bedel, November 1882 (Insecta, Coleoptera) over CIMBERIDIDAE Gozis, March 1882, and the proposed conservation of usage of *Cimberis* Gozis, 1881
(Case 3093; see BZN 60: 275–280; 61: 171)

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As an entomologist working on the taxonomy and systematics of certain groups of weevils (CURCULIONOIDEA) I noticed with great interest the study on the nomenclature of NEMONYCHIDAE. I was surprised by the complex problems outlined in the paper threatening the present nomenclature of the group. Lyal & Alonso-Zarazaga have thoroughly described the nomenclatural problems.

I support the proposals, especially the conservation of the family name NEMONYCHIDAE over CIMBERIDIDAE. The NEMONYCHIDAE are the most plesiomorphic branch of the weevils, so this family has been treated extensively in the literature and should be conserved.

Comment on the proposed conservation of the specific name of *Macropodus concolor* Ahl, 1937 (Osteichthyes, OSPHRONEMIDAE)
(Case 3255; see BZN 60: 206–207; 61: 114–116, 173–174)

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The comment by Kottelat et al. (see BZN 61: 114–116) to reject the proposed conservation of the specific name of *Macropodus concolor* Ahl, 1937 contains errors and mistakes disqualifying the authors' argument. Although the black paradise fish, *Macropodus concolor*, was originally described by Schreitmüller in a popular aquarium magazine (1936a, b), the first description satisfying the standards of fish taxonomy was published by Ahl (1937) in a well known and widely distributed zoological journal.

The argument by Kottelat et al. (BZN 61: 114–115) that *M. concolor* Ahl, 1937 is a junior homonym of *M. concolor* Schreitmüller, 1936 is not acceptable, because Schreitmüller (1936b) explicitly disclaims any intention to create a nomen novum (see Article 8.3 of the Code). According to the decisions taken at the Budapest Congress in 1929, after 1931 all works with nomenclatural acts have to be published with the intention and for the purpose of permanent scientific record (Articles 8, 11 and 13).

Even if the view of Kottelat et al. is accepted, *M. concolor* Ahl, 1937 is not automatically an invalid homonym of *M. concolor* Schreitmüller, 1936 because the latter is also a nomen oblitum. According to Article 23.9 of the Code it does not make

any difference if a junior synonym or a junior homonym is threatened by an unused older name, prevailing usage must be maintained.

The first revision of the taxon *M. concolor* Ahl, 1937 was by Paepke (1991, 1994), not Freyhof & Herder (2002). Paepke (1994) treated *M. spechti* Schreitmüller, 1936 as a nomen oblitum (see Paepke, 2003). He rediscovered Schreitmüller's note (1936b) only in 2002 and brought it to our attention in 2003.

The distinction by Kottelat et al. between significant and insignificant cases and between economically important species and fish species kept in aquaria is completely beside the point, highly subjective and against the spirit of the Code (see Article 23.9 and Recommendation 23A). In spite of its moderate size, the black paradise fish, *M. concolor*, is regarded as an edible fish well known to the people in the vicinity of Hue, the old capital of Vietnam.

The paper by Herder & Freyhof (2002), which was published in an aquarium magazine, is by no means inappropriately listed in our bibliography. Why did they send this paper to press before the publication of their revision? Our list of titles using the name *Macropodus concolor* includes only publications widely distributed or relevant to the nomenclature of *M. concolor* Ahl, 1937, but there are dozens of additional titles in which only the name *M. concolor* is used.

If the examples of Freyhof & Herder (2002) and Kullander & Britz (2002) who used forgotten fish names from obscure sources become an accepted thing, the continuity of scientific nomenclature will be threatened. There are many examples of obscure publications using names which would be a threat to well-known fish taxa, particularly in German aquarium magazines published in the first half of the last century.

The aim of our request, which is supported by many specialists who have been concerned with the black paradise fish, is to promote the principle of nomenclatural stability. In contrast, Kottelat et al. (2004) adhered to the Principle of Priority at all costs. We, therefore, would like to strongly defend our proposal to protect the specific name of *Macropodus concolor* Ahl, 1937.

Comment on the proposed conservation of *Viverra maculata* Gray, 1830 (currently *Genetta maculata*; Mammalia, Carnivora)

(Case 3204; see BZN 60: 45–47, 61: 119–122)

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1. We agree that an application to conserve a junior primary homonym may be submitted to the Commission under Article 23.9.5 of the Code. Since Article 23.9.5 applies only to names in use, we need to ponder what exactly 'in use' means and consider the fact that *Viverra maculata* Gray, 1830 has been used so far by only a

minority of the authors concerned with the relevant taxa. Indeed, after Coetzee's (1967) reference to the homonymy of *V. maculata* and its status as an invalid senior synonym of *Genetta pardina* I. Geoffroy Saint-Hilaire, 1832 (the pardine genet), the usage of *V. maculata* Gray, 1830 for any genet species has not been prevalent (see Grubb, BZN 61: 119–122). We think that, instead of using the specific name in question to identify a particular genet species, the authors of the application (BZN 60: 46) should have waited for the Commission's ruling and maintained prevailing usage as stated in Article 82.

2. It appears that the main objective of the proposal to validate the name *Viverra maculata* Gray, 1830 is to use it for a genet species (the rusty-spotted genet) whose valid name is currently controversial. However, a list of arguments both in favour and against attributing *maculata* Gray, 1830 to the rusty-spotted genet is essentially absent. We regard this matter as critical, both for consideration of *maculata* as a valid name and for its assignment to the rusty-spotted genet. When stating our objections to Case 3204 and suggesting different alternative proposals for providing a valid name to the rusty-spotted genet, we will refer to Gaubert et al. (2003), where the present issue is discussed in more detail and the 'neotype' of *V. maculata* Gray, 1830 was designated.

3. The former usage of *Viverra maculata* Gray, 1830 for the rusty-spotted genet was mostly related to the acceptance of its conspecificity with the pardine genet and to the fact that *maculata* was regarded as the valid senior synonym of the latter (Schlawe, 1981). This view was followed by some ecologists (Fuller et al., 1990; Angelici et al., 1999; Angelici, 2000) and taxonomists (Wozencraft, 1993) who were not experts in the systematics of the genus *Genetta* or fully acquainted with the imbroglio under discussion here. Only recently has *maculata* Gray, 1830 been used to denote the rusty-spotted genet alone and, even then, only by the applicants of the Case (Gaubert et al., 2002; Gaubert, 2003). Previous usage of the name *maculata* for the rusty-spotted genet should not be invoked if we now know that such usage had been essentially mistaken. Moreover, the previous usage of *maculata* as a valid name for the pardine genet is a good argument for opposing its transfer to another species since it would be a source of confusion and justification for requesting its suppression.

4. We accept as pertinent the arguments presented by Gaubert et al. (2003) that the type locality and species identification traditionally assigned to the original illustration of *V. maculata* are uncertain, although a West Africa locality and identity with the species *G. pardina* has always been indicated in the literature. However, an important problem with the proposals is that although the original figured specimen may not represent a pardine genet from Senegal, it is possible that the specimen may indeed represent that species after all. Below we describe why Gray's drawing may represent equally well any of two or three species regarded as separate today and, in consequence, why *maculata* is a nomen dubium in the context of *Genetta* taxonomy, and hence subjectively invalid. In order to state that the original figured specimen *maculata* represents a rusty-spotted genet, the proposal relies only on the observation and interpretation of the illustration. This is because the type locality and type specimen are both unknown and the descriptions attached to the image do not provide for an accurate determination of the species. The 'diagnostic' character invoked by Gaubert et al. (2003) to ascribe the drawing by Gray to a rusty-spotted

genet is far from clear. Crawford-Cabral (1981) figured a specimen of *G. pardina* from Guinea-Bissau kept at the Zoology Centre of the Scientific Institute of Tropical Research (CZ-IICT) in Lisbon, Portugal (collection number 1945–340) that matches Gray's illustration for *maculata* perfectly well. In another pardine genet specimen from the same collection (number 1945–68) this situation is even clearer. The light colour of the limbs is usually accepted as the character state that distinguishes *G. pardina* from the rusty-spotted genet (Gaubert, 2003). However, considering the example given above, this difference does not seem to be universal and hence is not diagnostic but more just a question of degree or frequency. The original figure of *G. maculata* (Gray, 1830) may not represent a rusty-spotted genet but instead a pardine genet, as stated by Schwarz (1930), or even *G. genettoides* Temminck, 1853, a form of dubious taxonomic status but closely related to both pardine and rusty-spotted genets.

5. We cannot accept the neotype designation, which accompanies the intent to use *G. maculata* (Gray, 1830) as the species name of the rusty-spotted genet. We believe that some of the qualifying conditions in Article 75.3 are not met. In view of the points given in para. 4 above, the neotype designation does not clarify the taxonomic status of the nominal taxon (required in Article 75.3.1) since the characters in Gray's drawing which are supposed to differentiate the nominal taxon from other taxa are not diagnostic (as required in Article 75.3.2). Furthermore, when addressing Article 75.3.6, Gaubert et al. (2003) followed a series of apparently sensible criteria in suggesting a type locality, but do not address one important issue (see para. 6 below). The taxonomic status of the rusty-spotted genets described from the region of the proposed type locality (*Genetta matschiei* Neumann, 1902, *G. schraderi* Matschie, 1902 and *G. deorum* Funaiolo & Simonetta, 1960) should have been assessed prior to designation of a neotype. If one or more of the nominal species in question are not conspecific with the neotype, then that neotype does not represent the whole of what we colloquially call rusty-spotted genets. If the authors of the Case had followed Recommendation 75B of the Code they would have been aware of the serious objection from other *Genetta* specialists to the neotype designation.

6. There is a problem in assigning *maculata* or any other name to the rusty-spotted genet at the moment. It fails to acknowledge the potential occurrence of more than one species within an assemblage which is clearly polytypic, reflected in the 17 names given to forms of the rusty-spotted genet (listed in Crawford-Cabral, 1981), most regarded as subspecies and distributed across a vast range of heterogeneous habitats. For instance, Crawford-Cabral & Fernandes (2001) have found evidence supporting the existence of three morphological species of rusty-spotted genets in Southern Africa alone. It is indeed possible that the rusty-spotted genets constitute a superspecies and then, since superspecies are not to be given formal nomenclatural recognition (Mayr, 1969), the search for a single valid name for this group of forms is a false quest. The conspecificity of some or all of the described forms of rusty-spotted genet, and consequently the synonymy of the corresponding names, has not been established. The uncertainty about speciation within the rusty-spotted genets, together with the absence of information other than morphological data for this species, suggests that it would be more advisable to wait for additional data before deciding upon such a difficult nomenclatural issue. At the moment we are undertaking DNA-based research on the population structure, phylogeography,

and putative speciation within the rusty-spotted genets. The results, when put together with the extensive available morphological data, will allow a much more comprehensive and sound decision on the systematics of the species.

7. Schlawe (1980) discovered that the type specimen of *Genetta rubiginosa* Pucheran, 1855, the name traditionally given to the rusty-spotted genets, following Roberts (1951) and Crawford-Cabral (1966), is an individual of a completely different species, *G. thierryi* Matschie, 1902. This led Crawford-Cabral & Fernandes (1999) to recommend a search for a new scientific name for the rusty-spotted genets, eventually following Article 23.3.5, but they warned that a thorough investigation was necessary, as outlined in para. 6 above, before making a decision. We follow the same line of reasoning here and furthermore state that we will have, in the very near future, results from our current research that we believe will be central to the rusty-spotted genet's taxonomy. This approach is the soundest in terms of taxonomy as well as for nomenclatural stability in this variable group of genets.

8. We strongly recommend that the Commission reject the proposals published in BZN 60: 46. We also agree with Grubb (BZN 61: 120) that the neotype designation by Gaubert et al. (2003) is invalid under Article 75.3 of the Code.

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INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described . . .'. The Abstract will be prepared by the Commission's Secretariat.

References. These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in BZN 59: 159–160.

Submission of Application. One copy should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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